S.376

Fred. Falkne.
Fred. Falkner.
28. Sep. 1852.

SOMERSETSHIRE

Archæological & Natural History Society.

PROCEEDINGS

AT THE

GENERAL, QUARTERLY, & ANNUAL MEETINGS,

Held during the years 1849 and 1850;

WITH

THE REPORT OF THE COMMITTEE; TREASURER'S STATEMENT OF THE ACCOUNTS; THE RULES OF THE SOCIETY; LISTS OF THE OFFICERS AND MEMBERS; PAPERS READ AT THE MEETINGS,

ETC. ETC.

TAUNTON:
FREDERICK MAY, HIGH STREET.
LONDON: GEORGE BELL, 186, FLEET STREET.

1851.

N. 376.

BRITISH MUSEUM
NATURAL HISTORY.

R. Walter Del.

M. & N. Hanhart. Lith.

TESSELATED PAVEMENT AT WADFORD,
COMBE ST NICHOLAS.

Academic Lr. - Taunton

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Preface.

The publication of this volume is somewhat later than the Committee had wished, but, on the other hand, more has been done than they at first contemplated. Instead of about one hundred pages, the materials have sufficed for nearly three times that number. The illustrations, too, have been multiplied in the same proportion. It will be seen that a change, rendered necessary by circumstances, has been made in some of the subjects ; certain papers announced for publication at the general meetings have been deferred for a future volume, and others substituted for them.

The Committee, as a body, are not responsible for the strict accuracy of the papers they have selected for publication, nor for the particular opinions and views of the authors. They trust, however, that, on the whole, they will be found to contain enough valuable matter to redeem any imperfections, and to give the volume a place in our local literature.

To enable the printer to execute his work with desirable speed, the volume has been divided into two portions, which have been in progress simultaneously; the former containing the proceedings at the several meetings, the latter, such papers as seemed better adapted for separate perusal. This arrangement has necessitated a distinct paging of the two portions.

The Committee had hoped to give a perfect list of the objects deposited in the Society's Museum, at Taunton; but it has been found impossible, as yet, to bestow the necessary labour in classifying and cataloguing. They beg to call the attention of the friends of the Society to the opportunity now presented for securing to the county one of the most valuable collections of fossils, &c. to be found in the kingdom,—that of the late Rev. J. Williams, of Bleadon. The Society is not rich enough to make the purchase out of its own funds; it must be done by the subscriptions of individuals.

It is hoped that members will not decline the labour of sending in replies to the questions circulated by the Committee, and which will be found at page 75 *et seq.* of the first part of the present volume. They may also do service by making it known, as they have opportunity, that workmen finding fossils, coins, or other objects of interest, will be rewarded for communicating their discoveries to the secretaries.

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ERRATA.

Page 40, first part, line 4, for *scoria* read *scoriæ*.

„ 4, second part, line 12, (in some copies), dele *of*.

„ 78, „ lines 14 and 24, for *fleurs* read *fleur*.

„ 84, „ lines 24 and 25, for *originally called the altar* read *originally an altar*.

„ 91, „ line 28, for *mortar* read *mastic*,

FIRST ANNUAL MEETING

OF THE

Somersetshire Archæological and Natural History Society,

Held at Taunton, on the 26th of September, 1849, at Twelve o' Clock, when about 350 persons were present.—An adjoining room was fitted up as a temporary Museum.

SIR WALTER CALVERLY TREVELYAN, BART. THE PRESIDENT, IN THE CHAIR.

SIR WALTER TREVELYAN, on taking the chair, observed that it was scarcely necessary for him to enlarge, before such a meeting, on the advantages of an association like this,—which was now in its infancy, but which he hoped would grow rapidly,—nor to show its utility in preserving, and collecting, and spreading information upon subjects of considerable importance to all of them; nor was it necessary, he thought, to state how rich this county was in all the objects for the investigation of which they were assembled together.

It was rich in the various departments of Natural History; as in Fossils, of which many splendid specimens of Saurians, (collected near Glastonbury) are in the British Museum,—Minerals, Plants, Animals and Fishes, in which latter departments one of their members, Mr. Baker, of Bridgwater, had made some interesting discoveries, speci-

mens of some of which he had contributed to the temporary Museum. It was not so rich in Roman forts, and other works, as some of the border counties were, where of old they had been obliged to keep large bodies of troops. Bath, however, presented many remains of Roman temples, villas, and sculptures; and several Roman roads traverse the county, near which other remains of that people are often met with. Some of the finest specimens of middle-age architecture existed in this county: some of the carved work, especially in wood, he thought, surpassed that of any county in the kingdom. The rood-screens, at Taunton and elsewhere, were particularly fine; and some good specimens of ancient domestic buildings had been preserved, owing to the county having been seldom ravaged by wars. The ancient papers, preserved among family records, in this county were very valuable, and there were few things of greater interest than the correspondence of former times. Researches of this kind had been brought much into note lately, and it was necessary that they should have some such society in this county. The society had numerous members, and he was very glad to see so many clergymen present, for they could render it most efficient service, by examining the parish records and also by reporting on the antiquities and natural history of their parishes. He might mention that very often the old bells of churches were found to contain some interesting inscription, such as the name of the Saint to whom the church was dedicated; and the staircases of the towers were frequently subjects of interest, for he often found that the covers of stone coffins and sculptured stones, had been used to form the steps. One of the objects of the Society was the formation of a Library and Museum to illustrate the Antiquities and Natural History of the county; and they

were in hope that in the course of a few years they might get together a rich collection. At present the Society was in its infancy, and having, as yet, no fixed locality they could not expect much; but they had already received some presents, and many valuable articles had been lent for exhibition. He would now call on the Secretary to read the report.

The Rev. T. F. DYMOCK *then read the following report:—*

"At this first general meeting of the Somersetshire Archaeological and Natural History Society, the committee have merely to report to the members the steps which have been taken, and the progress made toward the establishment of the Society. No actual work has yet been publicly entered upon; we have found sufficient employment in preparing the machinery by means of which we hope, by and bye, to explore the treasures of nature and art which this county contains, and to accumulate a body of facts in aid of the studies of the antiquary and natural historian.

"Somersetshire presents as good a field for investigation as perhaps any county of the same size in England; it has the natural advantages of varied soil and surface, and contains many important remains of mediæval antiquity; it is very desirable that this field should be explored thoroughly and systematically, and without further delay, before the works of nature or remains of art suffer any further change from the progress of cultivation, or through the lapse of time.

"It was with some such feelings as these that several gentlemen of Taunton and its neighbourhood met together in the spring of this year for the purpose of forming your society. Our doubt at first was, whether it should be a

society co-extensive with the county, or only one for West Somerset, of which Taunton is properly the centre. The former, as by far the most desirable object, if attainable, it was determined to aim at in the first place; failing this, it was easy to fall back upon the more limited plan.

"Another point to be decided was, whether we should proceed at once to frame the society's rules and appoint its officers, or wait till we could obtain the presence of a larger body of gentlemen from all parts of the county. The difficulty of securing anything like a general county meeting while everything was undecided, and the very existence of the society in abeyance—this difficulty on the one hand, and on the other the advantage of going forth to the public with the object of the society's operations defined, and the society itself in existence,—determined our course: we declared the existence of the society, and framed its rules. We then invited our personal friends and acquaintances to join us, and meeting with tolerable success with these, as soon as we thought it likely that our society might really become what we wished to make it,—a society for the whole of Somersetshire,—we issued a circular to every clergyman and magistrate resident in the county.

"The result has been that we now have a list of 250 subscribing members, and amongst them a very good proportion of our principal landed proprietors and literary men.

"We have purposely abstained from naming any place for the society's permanent head quarters, because there is no single town in Somersetshire which, from its position and importance, can be regarded as the capital.

"The city of Bath is in an extreme corner of the county. Wells, from having no railway communication, is practically still more remote. Bridgwater and Taunton

lie too far to the west. In this state of things members will naturally favor most that town to which they have the readiest access. We have felt this to be a considerable difficulty, and that it is impossible in the circumstances of the county, to make the choice of any one place satisfactory to all the members; and we think that, probably, the best arrangement will be, that the annual meetings* should take place in rotation—at all the principal points in the county, while one place is reserved where the other meetings may be held, and where the society's library and museum may be stationed.

"Whether Taunton is the best place for this purpose or not, it will be for the members to decide when they have had some experience of the workings of the society, and when they have discovered where its operations can be carried on most efficiently; only, the committee suggest that that decision should be made at no distant period, that members may not be in doubt as to the destination of any presents or loans which they may be disposed to make, and that no time be lost in getting together a collection of sufficient importance to be of real help in those studies which the society is established to promote.

"For the present your committee have provided a room in this town as a temporary receptacle, to which a few things have already been sent; before this year is over we hope to be obliged to seek better accommodation, and still further look forward to the time when we may be able to say that we possess a good collection of the antiquities and objects of Natural History which are found in Somersetshire, and also a well-furnished library, in suitable buildings which we can call our own.

* It has since been determined to make *all* the general meetings migratory.

"In order to the more effectual working of the two branches of science, which the society purposes to enter upon, the committee recommend the formation of two sub-committees — one for Archaeology and one for Natural History—to consist each of three members of the general committee, whose regular attendance may be calculated upon, and such other distant members as may be willing to offer suggestions in writing, and occasionally to give their personal attendance. It is obvious that by means of these sub-committees the researches which the society sets on foot may be made more systematically and correctly than if they were entrusted to the direction of a general committee. Already a sub-committee has been engaged in preparing questions, entering into details on Archaeology, which will very soon be circulated generally throughout the county; and it is further intended to prepare similar questions on Natural History,* as far as the subject may admit of it.

"The Committee have the pleasing task of acknowledging, with many thanks, the encouragement which they have received from those gentlemen of established literary reputation, who have consented to become honorary members. Some are now present to give us their counsel; others who are unable to be here to-day have given us reason to hope that they will come on some future occasion; and several, who have literary stores at their command, have kindly volunteered to communicate with us out of those stores on subjects relating to this county.

"In conclusion, the Committee are anxious to offer some apology for themselves, in coming forward so prominently in the formation of this society. Circumstances

* Questions on Archaeology and Botany have since been circulated, and will be found *infra*.

rather than qualifications—the lack of other persons better qualified and near at hand—and a taste for, rather than acquirements in, archaeology and natural science, have placed them in the position in which they now stand. They would rejoice to quit that position, and hand over the direction of the society to abler hands; and would suggest that if hereafter, in any one place in this county, a body of men can be found really qualified from their literary attainments to conduct our affairs, that place would be, for all purposes of this society, the most *central position* in Somersetshire."

The CHAIRMAN announced that Lord Portman, the Dean of Llandaff, and Sir Thomas Phillips regretted their inability to be present. The latter would prove a valuable friend, for his collection of manuscripts was one of the largest in the kingdom, and he had promised to supply them with copies of such documents as he possessed that referred to the county. Sir H. Ellis, of the British Museum, had also kindly promised his co-operation, as had Sir C. Trevelyan, of the Treasury, Professor Sedgwick, and Dr. Wilson, Secretary of the Society of Antiquaries at Edinburgh. The Chairman then introduced

The DEAN OF WESTMINSTER, (Dr. Buckland,) who said that as it had been his lot first to see the light in a contiguous county—being a native of Axminster—he was no stranger to the county of Somerset : and although it had never been his good fortune to possess property within the borders of that county—he meant property under that usual denomination, which those who had it not, called "*dirty acres*"—yet he had property in the county which he valued more highly. Scientific men were often justly

accused of neglecting pecuniary rewards for their services, and gratifying their ambition by the acquisition of literary or scientific reputation. It had been his lot a quarter of a century ago, to take possession within that county of a large manor—a manor that interfered not with the rights of noble lords or honorable gentlemen, but a scientific manor in which whatever he had done was convertible, if they pleased, to their pecuniary advantage. It had been his lot before he obtained the assistance of his kind friend the Dean of Llandaff, in the completion of this work, during three of the most interesting weeks of his life to travel in solitude—his only companion being an ordnance map, which he had geologically coloured on the spot—over the whole of Mendip, from one end to the other, for the first time that it was ever traversed by any individual of the human species, employed, and successfully employed, in ascertaining by personal inspection, the structure of that important range of hills. It had been his lot to traverse the whole of that small mountain chain, and at the end of three weeks, when he had finished his geological map of the district, and stood alone on one of the highest crests of Mendip, viz. on *Blackdown*, he felt a pride which he never felt before or since ; he felt a pride which he trusted it was not improper for him to feel—that he was the first of the human race whom God had permitted to understand the geological construction of His glorious works in that important part of the county of Somerset. He had occasion during many years to traverse this county on his way to and from Oxford, and there were few villages in it, of which he did not know the composition from personal inspection. And he could tell many of them, where they could *not* find the treasures of coal which interested adventurers would fain persuade them to seek to their great cost

and loss. Since the publication of his map of Mendip in the transactions of the Geological Society of London, the Government of the country and the Board of Ordnance, had begun to perceive the importance of knowing what the subterranean contents of every county were; but our brethren, in America, were a quarter of a century ahead of us in this respect. Every one of the United States had been geologically surveyed at the expense of the respective states of that enlightened republic, and the result was that they knew, within half a mile, what were the contents of the whole of their enormous continent. They knew, what was not known ten years ago, the fact that there was in North America a coal field, of excellent quality, larger than the whole of England—not of the English coal district only, but larger than the entire area of England! America —which, without this large coal field, must have depended upon other nations for many productions of manufactures, with this coal field would become a great manufacturing and commercial country. We might not live to see the time, but our posterity would live to see it; it was a time rapidly accelerated by the the increased demand of fuel for steam-engines for our manufactures, by the increasing application of fuel to the warming of houses, and by a thousand other applications of coal to uses which were not anticipated some years ago. There were portions of minor coal fields which were at this moment virtually extinct, e. g. that of Kingswood, in the neighbourhood of Bristol. The coal field of Radstock was a small one, and would soon be used up; the Forest of Dean was larger, but a large application would soon exhaust it, and our last hope was the stock in Monmouthshire and South Wales. The South Wales coal field would endure to the time when every particle of coal in the neighbourhood of Birmingham and the

coal fields of Staffordshire, Yorkshire, and Newcastle would be exhausted. Then our posterity would see the manufacturers of Birmingham transported to the coal fields of Monmouthshire.

Having apologised for this digression, Dr. Buckland proceeded to say that the history of the county of Somerset might be considered a type of the physical history of England. Its description might be made to form a small monograph—its subterranean antiquities forming one side, and its present natural history the other. He trusted that this society would give a stimulus to some properly qualified person to undertake such a monograph. Among the many advantages of a society pursuing the study of ante-deluvian, and post-deluvian, and mediæval times, the first was that it afforded the only occasion he knew for cultivating those feelings of brotherly love and friendship which he rejoiced to see existing among all classes, however differing one from another in politics or religion; it afforded *neutral* ground, on which persons of all parties in religion and politics, might meet: and he rejoiced to say that amongst the wise provisions of this institution there was one which forbad all discussions on subjects of a religious or political character. Here they met as brethren, as subjects of one common government, and children of one common God; and it was their business, to investigate the works of the Almighty in creation, and the works of Man in the ages long gone by, to collect evidence and documents concerning past political events, which affected us little now, except as they were beacons to admonish us to avoid those political errors into which our forefathers often fell and perished. Antiquity, he need not tell them, was of two kinds—natural and artificial—the earliest comprehending the works of God, and the later kind the works of man. The natural

subdivided itself into two great departments, the living and the dead; the extinct races of animals which peopled the world before the creation of man, and the remains of the works of the human race during the many centuries since man had been created.

The existence of such towns as Bath, Wells, and Taunton, in the richest valleys, and the non existence of any towns at all upon the tops of Quantock, or Blackdown, or Exmoor, depended upon geological causes. The very fact of persons being present in that room must be traced (if they went back to first causes) to a geological cause. Why were the meadows of Bridgwater and the rich marsh lands of Somerset so productive of fat cattle and well-fed inhabitants?—Why was the Vale of Taunton favored so much before all other localities in—he might say almost in the whole world?—Why that full and perfect developement of the human species both male and female?—Why so much peace and plenty? When travelling over Europe in 1820 with a German Geologist more observant than himself of such matters, his companion whenever they came to a town where there were more pretty faces than usual, would say—"We are coming to a good geological formation."—And the moment they got into the mountain regions—the Alps, for instance—ugliness was the universal characteristic. There was as much difference between the inhabitants of the rich valleys and the mountaineers as between one of their own well-fed beasts and a half starved Irish or Welch bullock. An old Scotch proverb said "the stomach was the man" it was the condition of the stomach, that from infancy, through life, affected not only the strength, but the beauty of the "human form divine." Now he wished to remark that, although our government, following the example of America, had but a very few years since, (and after a geolo-

gical map of England had been constructed by private individuals) come to recognise the value of geology, and to desire to know the contents of their kingdom—as America knew her gold region in California, and her coal fields in Kentucky, and on the banks of the Ohio—yet those who were entrusted with the education of our people still cared not a rush about these matters. This was a gross defect of our national education, which is to us a reproach as a people. Whilst young men were crammed to insanity with the crotchets of Greek metres, they were almost taught to despise the works of God. The study of Natural History had been utterly neglected at our public schools, and he knew certain persons in authority in certain universities of the land who had said "that man is good for nothing, for he is addicted to the vain study of natural sciences." They were ignorant of science themselves, and wished to keep others so. It was the old conclusion,

"Damnant quod non intelligunt."

It was time these things were put an end to, and through the energies of such societies as this, the "consummation, so devoutly to be wished," was likely to be effected. He then proceeded to prove his assertion that the actual presence of the audience around him was attributable to a geological cause. He would show this by contrast—by referring to certain lofty districts in the county where they could not find that perfection of man and beasts which they saw in its valleys—first, because there were no human beings there, the hill tops being too poor to attract or feed them. And, secondly, because the very cattle upon them were half starved. He would allude first to the Quantock Hills: all that he remembered of their history when he was a boy, was, that persons brought from these hills to Axminster and Lyme, donkeys laden with wortel berries to make pies;

how small is the revenue from an acre of wortel berries! Pointing on the map to the regions of barren unproductive slate-rock, he observed that there was none of the red oxide of iron there. Let the soil be red, and the soil never would be bad. The summits of Quantock and Exmoor being blue slate were sterile; but the moment they came to Dunster Castle and Nettlecombe, where the soil was red and the climate mild, they found the finest oaks in England, oaks which were sent for from Liverpool to make the stern posts of the largest vessels, and purchased at immense prices, for they *must* have them. It was a geological cause which made these oaks worth 100 guineas each. They could not get such timber on the blue slate, and even if the soil were good the climate would spoil them; for where rocks where thrown up 1,800 or even only 900 feet, as on Dartmoor and Exmoor, if the soil was good the climate would prevent the trees from growing as in sheltered valleys. But where nature had been kind, man was indisposed to labour. Why was it that the Scotch were half a century ahead of us—that Scotchmen were to be found in every town in this kingdom, and in the British empire—that three-fourths of our officers in India were from Scotland—that the Scotchman was found at every court in the world—that English gentlemen preferred Scotch gardeners, and were getting 25 per cent. more from their estates when managed by Scotch bailiffs, or on the Scottish system? It was because the intelligent natives of that highly civilized land had the good sense to discover the value of education. Nature had made Scotland a sterile and therefore an improving country; but the natives of the County of Somerset were in a state which deserved compassion. In the Vale of Taunton and at Bridgwater the

land was too fat, and afforded not to the well-fed farmer sufficient work.

"Pater ipse colendi
Haud facilem esse viam voluit."

It was not easy to get a crop of corn from the heights and mountains of Scotland, or from the sides of Exmoor or Dartmoor; God had appointed that industry and energy should be the lot of the greatest part of mankind; but the inhabitants of these fertile valleys formed a pitiable exception; where God had done much, man was a lazy animal, and would do little; and where farmers had nothing to do but to buy lean Welch cattle—turn them into the Bridgwater meadows to walk about and get fat—drive them fattened to Bristol, and come home with the money in their pocket—where this was the case, he had compassion on them. It was a temptation to idleness, which led to every vice and every disease, both of the body and the mind. The farmer under such circumstances is under continual temptation to become indolent and sottish—he might eat, drink and smoke too much and get gout, and die of indigestion. Therefore he said to those farmers who occupied the fertile valleys of Somerset, that on all the principles of human nature they ought to be bad farmers. Tenants on bad lands must be good farmers, or they must starve; but by all the usual motives of human conduct the occupiers of rich lands will be made bad farmers, and whenever they are good, how great was their merit in resisting the temptations by which they were assailed! They had in the low Somersetshire valleys the very fat of the earth—the scourings of the impoverished hills about Sherborne which were washed down the valley to make the fertile marsh lands that extended from Ilchester to the sea; into the fertile valleys

of the Parret, the Brue, and the Axe, the goodness of the country was swept, to form the rich grazing lands that lay along the rivers. The best lands of Somerset were of three kinds—marsh lands, red marl, and sandy loam of the lower oolite formation. Let gentlemen buy their estates (and not sell them) on the red soils; let them buy them on the red marl; but don't let them invest their capital upon Blackdown or Whitedown or any Down at all.

The Mendip hills formed a high range, extending east and west, from near Uphill, on the Severn, almost to Frome, they consisted of mountain lime stone raised up by volcanic forces from the bottom of an ancient sea, and dipping in two opposite directions (viz. north and south,) on each side of a long axis of elevation, composed of old red sand stone. The beds of lime stone are placed like sheets of lead on the boards which form the two sides of the high pitched roof of a gothic Cathedral. Mines of lead and zinc were worked long ago by the Romans, and still are worked, though scantily, on the Mendips.

If we ask the cause of this extensive elevation of a chain of hills, 20 miles long and from 3 to 6 miles wide, and from 200 to more than 800 feet in height; we must refer it to the same uplifting and explosive force of vapours, generated within the earth by subterraneous fires, which are still producing earthquakes and exploding ashes and streams of lava in regions which are at this time agitated by nearly 200 burning volcanoes on the actual surface of the globe.

Fractures and dislocations which attended the elevation of these strata from the bottom of the sea, may be seen in the rocks of Cheddar Cliffs on the east flank of Mendip; and in the yawning chasms of Brockley Combe and Goblin Combe, on the west side of Broadfield-down, near Bristol; and in the gorge through which the Avon passes at Clifton.

But the vents that have discharged igneous rocks in the hills of Somerset are few; one at Hestercombe, in the south flank of Quantock, was described by Mr. Horner, more than 30 years ago; a second was noticed by myself in 1817, on the N. W. shoulder of Broadfield-down, near the upper terminus of Brockley Combe: of this I have published no account, and I am not aware that it has been recognized by any subsequent observer: a third has been laid open by a railway cutting at the west end of the Mendip chain, near Uphill.

A rich iron is to be found near Minehead. He might mention (though somewhat reluctantly, because it appeared egotistical,) that after Sir H. De la Beche, with his staff of geological officers, had gone over the ground, they could not find a single error in his map of Mendip, whilst *per contra*, he had detected a military error in the ordnance map—a camp on the Mendip hills, which had been put in the wrong place; the Mendip and Dartmoor and Quantock hills, and nearly all the hills in the world, had been raised, from the bottom of the sea, in which they were formed, to become the more or less perfect abodes of the human race.

The rev. gentleman then turned to consider the various kinds of stone observable in the geological formation of the county. There was the lias which extended largely over England, France, and Germany. That lias was not only of use to the architect, for making Roman cement and pavements, but useful also to the Palœontologist. It was a formation of which it might be truly said, as Virgil said of some lands prolific of the farmer's pests,

> "Quæ plurima terræ
> Monstra ferunt."

The monsters of the lias were, indeed, most awful monsters, they were creatures which, had the present company been

living in their age, would have swallowed us up in less time than he had taken to tell this story. He had valued one collection of these monsters which formerly belonged to Mr. Hawkins, and is now in the British museum, at £2000. They were so perfect that they could be dissected almost as an anatomist would dissect a dead dog; the skin, the scarf skin, and even what they had eaten for their dinners, was discoverable. After referring to the Plesiosaurus discovered by Mr. Conybeare, Dr. Buckland stated that on Tuesday last, at Birmingham, there was laid upon the table, a thigh-bone larger than that of any elephant that was ever seen; it had no marrow, it was as solid as a gate-post; it had a fibrous structure which exists not in any whales; and particular perforations for blood-vessels, which exist now only in the family of frogs, and toads, and salamanders. It was the thigh-bone of a colossal salamander *(the chirotherium)*, and was found at Aust Passage, near Bristol, not 35 miles from Taunton.

Turning to the architecture of the county, he spoke of Wells Cathedral, built of stone from Doulting near Shepton Mallet, of a subdivision of the inferior oolite formation, of a very enduring character. He wished he could say as much for the beautiful Church of St. Mary Magdalene in Taunton, which was built of Keuper sand-stone, and which had much decayed. The ashlers were of Ham-hill stone, which was also decaying; the quality of the stone being inferior to some which had been obtained at Ham-hill in times previous to the building of Taunton Church. At Ilminster, Yeovil, and Crewkerne, houses were built of a yellow sandy stone of the lower oolite formation; so they were in the towns of Towcester and Northampton, where it bears the local name of gingerbread rock. The Bath stone was used abundantly in London; this was a gross mistake, they could

get a much more enduring stone from Normandy and from Yorkshire. As long as he lived, no Bath stone should be used again on the outside of Westminster Abbey. Having descanted upon other topics the Rev. Dr. entered into a warm refutation of the assertion that the study of geology clashed with theology, and said all these geological formations were anterior to the creation of man; they were indeed preparatory to his reception on a surface fitted to sustain him by its animal and vegetable productions. The difficulty of reconciling the earth's high antiquity with the bible chronology has been satisfactorily explained by many writers; but by none so well as in a recent small volume entitled "*The Earth's Antiquity*," by the Rev G. Gray.—The style of this volume is beautifully poetical, rigidly logical, purely classical, and profoundly religious; and would richly reward the perusal of every literary and scientific reader in Christendom, in these days when the facts of geology are unjustly supposed by many not to be in accordance with the Mosaic record. He quoted with much solemnity the line of Byron—"the dust we tread upon was once alive" —and concluded by asserting that geology led them to see in the relics of bye-gone ages the works of an All-wise, Omniscient, Omnipresent, All-great, All-powerful God, who has "created all things, and for whose pleasure they are, and were created."

Mr. F. H. Dickinson, said, that after the very eloquent address of the Dean of Westminster, it would hardly become him to seek to occupy the time of the meeting at any length: but he might be pardoned for calling attention to the more strictly archaeological investigations which the society proposed to institute. The effect of Dr. Buckland's address, in one part, was to show that the studies of archaeology and of natural history were neglected:

and he (Mr. D.) feared that his remarks were too true as regarded Somersetshire, in common with the country generally. Those who had followed these studies were, therefore, the more entitled to the thanks and gratitude of the public for their labours, and for the valuable discoveries they had made; such discoveries could not be made by every one; a day's walk on Mendip of Dr. Buckland, and Mr. Conybeare, would produce far more excellent results than much more extended researches of men not equally qualified, and the same might be said concerning natural history. But in investigating the antiquities of their own neighbourhood each person, however small his attainments, might give valuable information, and the paper of queries which it is the intention of the society to circulate, would afford them all an opportunity. If he was not mistaken, very valuable materials were collected for a statistical survey of Scotland, by the circulation of such a paper among the ministers of the Kirk of Scotland. Mr. D. then alluded shortly to the prevailing character of the church architecture of the county; the third pointed or perpendicular, which, though approved of especially by some persons, could not be considered so interesting or beautiful as the earlier styles, and drew attention particularly to the remains of earlier work, which may be detected in some churches as at St. Cuthbert's, Wells, and at Martock; a matter which should be carefully studied, whether it be viewed in connexion with the plans of the churches, or the alterations they have undergone, or more generally with reference to the history of architecture.

The Museum.

A TEMPORARY museum was formed in one of the large rooms in the Market House. Most of the objects exhibited were deposited by the undermentioned friends of the society.

By Sir Walter Trevelyan.—Original Grant of Nettlecombe, (Hen. II). Confirmation of the same by Henry II., dated Bruges. Appointment by John of Gaunt, as King of Castile, of the Earl of Devon as his Lieutenant during his absence from England (1377). A deed of Mortimer, Earl of March, [21, Rich. II.] Grant by Richard Mallet, (9 Hen. V). Deed of Hugh Courtnai, Earl of Devon, (6 Hen. VI). Deed of Ann Countess of Devon, (21 Hen. VI). Confirmation under Great Seal, of the Chantry of Simon Ralegh, in Nettlecombe Church, (1453). Directions for the Chaplain of Simon Ralegh's Chantry, (1489). An indulgence granted to John Pampius, *(printed.)* Miniature Portrait of Chas. I., worked with his own hair. Fine Seals were attached to most of the above ancient charters.

By Rev. P. Thomas.—Portions of an ancient *Reredos* from Wellington Church, richly sculptured, painted, and gilded. [See Mr. Giles's paper, with engraving, in the second part.]

By Rev. T. F. Dymock.—Antique head (supposed of Germanicus) dug up at Nismes. Selections from a cabinet of coins, exhibiting the principle features of the Roman and English series. Saxon and Norman pennies struck at Bath, Taunton, Ilchester, and Watchet. [See Mr. Dymock's paper in the second part.]

By Mr. George Roberts, Lyme Regis; Rev. C. P. Parish; and Rev. T. F. Dymock.—Remains of Ichthyosauri Penta-

crinite, and Sepia, from the lias of Lyme Regis and Somersetshire.

By Sir Thomas Phillips.—A transcript of a Deed of the 13th century, relative to Huntspill Church.

By Mr. Harris, Bath.—Roman Sword, Celt, and Pottery, found in Bath, and its neighbourhood.

By Mr. R. Ready, Norwich—Casts (132) of the Great Seals of England, from Edward the Confessor to William IV. Models of corporate and other seals, illustrating Somersetshire.

By Rev. J. Horner, Mells.—Drawings of Churches in Somersetshire, and several valuable ancient manuscripts.

By Rev. M. Clerk.—Five ancient deeds relating to lands near Frome. Six Spear Heads. A piece of Pottery found in the Nilgherry Hills, India. Several ancient Egyptian Rings, Scarabœi, Amulets, an Idol, and Glass Seal. Fossils from central India. Fibula found in a drain at Wells.

By Mr. John Bluett.—A collection of English stuffed Birds in 80 cases. Coins of William I. and William Rufus, struck at Taunton. Mexican Crystal, (St. Isidore). Ancient German Enamels on Platina, Bacchus and Ceres. Ancient Silver Gilt Ring. Two ancient Lead Casts found in London.

By Major Raban.—Tertiary and Hardwell Fossils.

By Rev. W. Pyne.—Account of the Pitney Pavement, by Sir R. C. Hoare.

By Mr. Eales White.—Coloured Drawings of the Cathedrals of England. Drawings of Fossil Ornithocephalus, and the old Manor House at Orchard Portman. Patterns of Roman Pavements at Watford, near Chard, and at Pitney, near Somerton. Stuccoes from Pompeii. Fragment of Tessellated Pavements from the Baths of Titus, and of Caracalla. Ancient Church Music. Specimen of Vegetable Ivory. Lamp of Terra Cotta from Pompeii.

By Mr. A. Ramsay, Beaminster.—Adoration of the Magi, ancient Oak Carving.

By Mr. W. M. Kelly.—Three specimens of Fossil Remains. Cast of Head of John Locke.

By Mr. W. D. Crotch.—Eggs of British Birds. [See Mr. Crotch's paper in the second part.]

By Mr. W. F. Elliot.—Drawings illustrative of Somerset. Paintings, cast of Foliated Capital, and Sculpture from the house of the Carmelite Friars, Taunton. Paintings of the Landslip at Lyme, and of the Ram's Horn Bridge, Taunton.

By Rev. T. F. Dymock; and Rev. C. P. Parish.—A collection of some of the rarer Plants of Somersetshire.

By Mr. Ashworth.—Coloured Drawing of St. Mary's Church, Taunton, from the south-east.

By Mr. C. E. Giles.—Coloured Drawings of the exterior and interior of Nunney Castle. Full sized casts of the Spandrils of west door of St. Mary's, Taunton; [see paper in the second part.] "*Statistique Monumentale de Paris.*" "*Illustrations of Cothele House.*" "*Churches of Northamptonshire.*" Three vols. of Scraps, Sketches, and Memoranda. A coloured drawing of King Alfred's Jewel.

By Mr. A. A. Clarke.—Views of ancient remains in Taunton. Encaustic tile from the Monastery at Athelney.

By Mr. J. A. Roberts.—Encaustic tile and coloured glass from Glastonbury Abbey.

By Mr. S. Cox.—Fibulæ, Celt, &c.

By the Earl of Cavan.—Spine of Menanthus monili, jaw of Saurichthus, and other Fossils from the coprolite bed of the lias, at the shore near Sherton Bars.

By Mr. W. Baker.—Fossil Corals, &c., from Cannington Park and Over Stowey; and numerous zoological and anatomical specimens. [The Fossils are referred to in his paper in the second part.]

By Mr. W. Tucker, Cannington.—A case containing male and female Grasshopper warbler *(Curruca Locustella)*

By Rev. John Scott, Bath.—Rare Books, MSS. and Prints, illustrative of the Antiquities of England. Miniature Portrait on copper, by Guido. Sketch by Hogarth. Small Landscape on silk, said to be by Titian. Three Marble Statues (one dug up at Bath). Ancient Signet Ring supposed of one of the early Kings of England.

By Mr. John Woodland.—Collection of British Insects, mostly from the neighbourhood of Taunton.

By Rev. H. D. Wickham, Frome.—Charter of King Ina (702) relating to property at Croscombe.

By Mr. F. Lake.—Double Ryal of Queen Elizabeth Daguerreotypes of St. Mary's Church, Taunton. An ancient Pedigree.

Mr. C. J. Richardson—The Elford Effigies, from Lichfield (23 casts). Fifteen Rubbings from Brasses, &c.

By Mr. J. Britton, F.S.A.—Daguerreotype by Claudet. Busts, Models, Drawings, Books. Gold Medal from the King of Prussia to J. Britton. Portfolio of Drawings illustrative of Somerset and Wilts.

By Dr. Daubeney.—Drawing of Tessellated Pavement found in Dyer-street, Cirencester.

By Mr. W. Stradling.—Celts, Spears, &c. found in the Turbary, near Chilton-on-polden. Roman Coins from Bath. Moulds of Roman Coins, from Chilton Turbary. Battle Axe, and two Monmouth Bills, from Sedgemoor. A large Celt from Somerton. A Lamp from Lynn, Norfolk.

By Mr. J. H. Payne.—Specimens of Minerals.

By Mr F. C. Stockdale.—Portfolio of Sketches of Somersetshire Churches. Drawings of Barrington Court; Montacute House; and St. Mary's Church, Taunton.

By Rev W. H. Turner.—Print of Evercreech Church.

By Rev. E. O. Trevelyan.—Carvings from the Church of Huish Champflower.

By Mr. Moore, Ilminster.—A rich collection of Fossil Fish, and Insects, from the lias near Ilminster.

There were numerous other curiosities exhibited, but it was impossible to make a complete list, in consequence of the parties who had deposited them having omitted to send descriptions.

First Quarterly Meeting held at Taunton, January 2nd 1850.

The Rev. F. B. Portman, Vice-President, in the Chair.

Morning Meeting.

THE CHAIRMAN congratulated the society upon its present condition and prospects, there being already 250 subscribing, and 25 honorary members, and a suitable room provided for a Library and Museum, to which some valuable presents had already been made.

He suggested, that members at large should take their share in the labour of furnishing scientific information, and not suffer it to devolve on a few; besides elaborate papers which some might find leisure to prepare, short written notices and oral communications would be useful—meetings would thus sometimes take the form of a debate, and not consist merely of a series of lectures.

The Chairman, in conclusion, dwelt upon the practical advantages likely to accrue from the study of Archaeology and Natural History, as well as the moral and intellectual improvement always attending such pursuits.

The Rev. W. R. Crotch read a paper, the object of which was to encourage a taste for the study of Natural History, by mentioning some of the numerous facts to be observed by those who enter upon so interesting and varied a field of enquiry.

Dr. Woodforde presented a communication from Mr. Baker, of Bridgwater, containing his remarks on the Ornithology of the county; amongst which was one to the effect that out of 344 species of birds indigenous in this island, 233 have been found in Somersetshire.

Mr. W. D. Crotch furnished a paper on the Eggs of Birds, the result of his own observations in the immediate neighbourhood of Taunton. It is given *in extenso* in the second part.

The Rev. C. P. Parish followed with a paper advocating the claims of Botany to rank among sciences of practical utility, and at the same time setting forth the facilities for following up this pursuit presented by the varied soil and surface of Somersetshire.

Mr. W. Beadon produced a fine fragment of the horns of an extinct species of Elk. In excavating at the gas-works in the town of Taunton, the workmen had come to what seemed to be the ancient bed of the river Tone, and upon the gravel they had found the trunk of a tree, under which was this specimen.

The Chairman then adjourned the meeting to the evening.

Evening Meeting.

The Rev. F. Warre read a paper on an ancient earthwork on the hill above the church of Norton-Fitzwarren, and presented a plan of the same. Both will be found in the second part.

Roman Remains at Combe St. Nicholas.

Mr. R. Walter (of Stoke-sub-Hamdon) read an interesting paper on some Roman remains at Combe St. Nicholas, accidentally discovered about 40 years since ; and exhibited drawings, (of one of which we have given a coloured lithograph) beautifully executed, of two tessellated pavements which had then been excavated. The patterns were tastefully and elaborately worked. The centres of the pavements were composed of tesseræ, or cubes, of half an inch square, and the borders of larger cubes of an inch square. The patterns were at first very perfect, and the colours vivid and fresh, but they were soon despoiled by visitors' depredations, and in the first winter the surfaces were lifted by frost, and on the succeeding thaw the whole fell to pieces. Both pavements were bounded by walls of rough stone stuccoed with a very hard cement, on which were some patches of colour. The object of this paper was to record the particulars of these interesting remains, and to direct the attention of the Society to the spot, where it was probable, and nearly certain, that other pavements, and some of greater magnitude, still remained undiscovered. Those mentioned were only six feet wide, and were probably small rooms for baths or sudatories, which it was reasonable to conclude were not the only rooms of the sort, nor constructed in such a spot, far from any known Roman station, without some larger rooms near them. The probability

then was that these formed a small part of a Roman villa, and that at no great distance some noble remains were still lying under the sod. In the ground plan presented, the position of these two pavements was pointed out. At no great distance, in a N. W. direction, was a mill-pond, from which a small canal (then a ditch) led towards the site mentioned, the bottom of which still retained flat paving stones, intended probably for the supply of water to the baths; a considerable number of tiles, some flat and others curved, for conveying water, were lying mixed with the soil around. A small bronze cast of a left hand, finely modelled, was discovered near this spot, and was thought at first to be part of an entire human figure, probably still remaining there; but from the finish of its termination at the wrist, and from a socket therein, this little relic was evidently not a fragment, but an instrument, not uncommon among the Romans, called *Scalptorium*, or in plain English, a *Scratch-back*. It was then in the possession of Mr. R. Walter of Combe Head. Mr. Walter very properly suggested that previously to any researches being made, funds should be provided for erecting some kind of building for the security and preservation of any pavement that might be laid open; otherwise it would soon be destroyed by wanton depredations, by the action of frost, and by worms lifting from beneath, as many others had been; but if judiciously preserved, those beautiful remains of Roman taste and skill might remain for ages to come. He was led to anticipate that at some future meeting of this Society, an excursion might be undertaken, for the purpose of exploring this interesting spot, which remained, with the exception of the above partial discoveries, still wrapped in the mysterious mantle of antiquity.

The Rev. T. F. Dymock gave a brief account of the early coinage of this country—British—Roman—and Saxon—and exhibited drawings of some of the most remarkable specimens of British and Saxon workmanship. He also presented a list of all the coins which are known to have issued from mints in Somersetshire, from Edward the Elder, to Henry III. This list, with engravings of the coins, and also the paper, divested of the matters not relating to Somersetshire, are given in the second part.

Mr. C. E. Giles made a few general remarks on Anglo-Saxon and Norman architecture, and suggested that the most sure distinction would be found in the masonry, if Churchwardens could be persuaded to remove the plaster and whitewash, in which the walls are encrusted. He then gave a detailed description of two small Somersetshire churches, in which he had observed considerable portions of Norman work. The portions of this period remaining at Thurlbeer, were the nave, arcades, and northern wall of the chancel. At Ashill, the north and south doorways, the arch between the nave and chancel, and on either side two smaller arches in the eastern wall of the nave. He thought that by the restoration of the chancel arch, and north and south doorways to Thurlbeer, and arcades and corbel table to Ashill, two very similar churches would be obtained, and that the features remaining to be added to each were those which were common to the generality of country churches in the middle of the 12th century. Mr. Giles's paper was illustrated with several water-colour drawings of portions of the churches of Ashill, Thurlbeer, and Stoke-sub-Hamdon. He concluded with a notice of several other early churches, which it would be important to examine, as containing valuable remains of the 12th, 13th, and 14th centuries.

The Rev. F. B. Portman exhibited a rubbing of an inscription on one of the bells in the Church of Staple Fitzpaine. He had forwarded it to the British Museum, but no one there had been able to decipher the *second* word in the line, a fac-simile of which is here given.

The inscription runs thus,

✠ Est * * * collatum ihc istud nomen amatum.

The Rev. T. F. Dymock exhibited a letter belonging to Col. Tynte, from one of our Henrys to William Dittisham, of Cannington, directing the appointment of a Prioress to the Nunnery in that village.

The Rev. W. F. Chilcott signified his intention of proposing that books and other articles should be deposited in the Museum, as a loan, with the understanding that they might be reclaimed in the event of its not being judged expedient eventually to establish a Museum.

After a vote of thanks to the President and Officers the meeting separated.

Second Quarterly Meeting held at Bridgwater, April 10th, 1850.
The Right Honorable the Earl of Cavan, Vice President, in the Chair.

Morning Meeting.

THE CHAIRMAN having opened the meeting with a suitable address, Mr. W. STRADLING read a paper on the Turf-Moors lying between Glastonbury and the Bristol Channel. The same is given *verbatim* in the second part.

The REV. F. WARRE read a paper on the distinction between Anglo-Saxon and Norman Architecture. The argument being, that where in early Norman Churches, details are found very different from those common in that or any later style, they may be reasonably referred to the Saxon period. The Rev. gentleman expressed his belief that relics of Saxon work so intermixed with Norman, are by no means so rare as has of late years been generally supposed. He further argued—from the close connexion with Rome of the Anglo-Saxon Church during so many centuries, the frequent visits both of princes and priests to the eternal city, and the descriptions of Saxon authors and illuminations in Saxon Missals,—that it was highly probable that the style of Saxon buildings was a variety of Romanesque, probably a rude imitation of Lombardic, with some intermixture of Byzantine details, bearing no greater resemblance to the Norman than was necessarily the consequence of their common origin from the classical Roman.

Mr. JOHN BROWNE exhibited a specimen of British gold ring-money, dug out of the brick-clay at *Hamp*, close to

Bridgwater, six or seven feet below the surface. Some very ancient pottery was found near the spot, several feet deeper in the same deposit.

Mr. BAKER, by the kind permission of Colonel Tynte, presented the Museum of the Society with ten very rare prints illustrative of Old Bridgwater. The drawings were made by the late Mr. John Chubb, of that place, and were engraved at the expense of Colonel Tynte, for his own use. With his permission, the Committee are enabled to enrich this volume with the very interesting views of the High Cross and Old Bridge in the second part. Mr. Baker has furnished a short notice of each, which will also be found there.

The company then visited the old Parish Church of St. Mary, then undergoing restoration, and afterwards the lately built beautiful Church of St. John the Baptist.

Evening Meeting.

Mr. BAKER read a highly interesting paper on the Geology of the county, which will be found in the second part.

Mr. C. MOORE, of Ilminster, addressed the meeting on the Lias Formation, which he has kindly promised to embody in a paper to be read at a future meeting of the society.

Third Quarterly Meeting held at Frome, July 10th, 1850.
F. H. Dickinson, Esq. Vice President,
in the Chair.

Morning Meeting.

THE CHAIRMAN briefly addressed the meeting on the benefits likely to be expected from the advancement of the Society, and was followed in the same path by Mr. C. E. GILES.

The Rev. H. D. WICKHAM read a paper on the parish church of Frome, now known as *St. Peter's*, but believed to have been originally dedicated to St. John the Baptist. The earliest church occupying the same site was built by Aldhelm, Bishop of Sherborne, A.D. 705. The present building, about 135 feet in length, and 48 in breadth, was constructed at different periods during the 13th, 14th, and 15th centuries. Under the eastern window repose the remains of the venerable Bishop Kenn. A brass plate to his memory has been lately placed in the chancel under a beautiful obituary window, also to his memory, presented by the Marchioness of Bath.

After the reading of the paper the members visited the Church, where they could not fail to be struck with the contrast which the recent restoration of the chancel presents to the dilapidated state of the other portion of the building, and the unsightly deformities which the laxity of the past century suffered to gather round the body of the building, and which we may hope the devotion and better taste of the present may speedily sweep away.

Evening Meeting.

Dr. HARRISON favoured the meeting with an elaborate paper on *Radiata*, or Radiated Animals, of which there is a valuable collection in the Museum of the Frome Literary and Scientific Institution.

Dr. WOODFORDE adverted to the importance of keeping meteorological registers throughout the county, and expressed his readiness to co-operate with any who might wish to enter on the work.

The Rev. Dr. GILES proposed in a few words to point out the masterly skill with which King Alfred planned and executed, in the immediate neighbourhood of Frome, the military manœuvres by which the Danes were defeated at Eddington, and the whole of England, for many years after, saved from their ravages.

In the first week of January A.D. 872, whilst Alfred was reposing with a small band of faithful soldiers at Chippenham, a royal seat of the kings of Wessex, Guthrum the Dane came upon him with overwhelming forces, and after an obstinate fight, drove the king into the wilds and woods of Selwood Forest. At the same instant, three other Danish chiefs, Hinguar, Hubba, and Halfden, fell upon Earl Ordgar, on the northern coast of Devon. Here, however, the enemy were defeated. The castle of Kinwith gave refreshment and courage to the English, until they sallied forth and cut the Danes in pieces. The king knowing that Somersetshire, Dorsetshire, and Devonshire formed the strength and now indeed the last hope of his kingdom, caused his men to disperse westward, so that the enemy, finding no traces of a foe remaining, gave themselves up to pleasure, and seem to have been completely

lulled into security; for, five months afterwards, they were surprised by Alfred, at not more than 20 miles from the place where he had been beaten.

It is the popular belief that Alfred lived at Athelney during the interval, concealed in the guise of a peasant. He was there concealed, it is true, but it was in the guise, not of a peasant, but of a warrior. He constructed on that small island a fortress, and a bridge defended with towers. Here he made head for awhile, until his emissaries informed him that his faithful men of Somerset were ready to obey his call; perhaps also, until the Earl of Devon, with his victorious troops, could join him. Then was the time for action. Riding in the gray of morning 40 miles from Athelney to Brixton Deveril, he found himself there when night closed, at the head of a gallant army. By what means could that army be so suddenly collected and concentrated upon one point? This difficulty has never been cleared up by those who have written on the deeds of Alfred. I will attempt to solve it with the aid of popular tradition. On a headland within a few miles of Brixton Deveril, is a high tower, built to commemorate the raising of Alfred's standard, (so the country people have handed it down,) just before the last campaign with the Danes. Alfred passed this lofty hill in his rapid morning ride to Brixton. It is seen we all know, to the distance of 50 miles on almost every side, down into Dorsetshire, away to the east into Wiltshire, and throughout all the lowlands of Somersetshire to Quantock and the Bristol Channel. Everywhere it is seen except in the valley where the Danish army lay, between Westbury and Eddington, as far as the unlucky battle field of Chippenham. Here then is the solution of Alfred's wonderful success, a manœuvre which equals Napoleon's at Austerlitz, and

might have taught many a modern general the irresistible effect which is produced by numbers brought to bear upon a single point. King Alfred's standard acting as a beacon, unseen by the enemy alone, brought his men, each moving on his own radius of the circle, to the centre, where the king was waiting; a rapid march along the hill country, enabled him on the second morning to seize on the eminence where stands the mound called Bratton Castle, and the Danes almost terrified into defeat before the armies met, submitting to their master, suffered themselves to be made cultivators of those lands, which they had come to burn and destroy.

Dr. WOODFORDE, in confirmation of this view of Alfred's strategy, reported that a custom prevails at Taunton down to the present time, of holding a ball, in the cold season of the year, called the Ashen Fagot Ball, in memory of the delight which King Alfred's men, coming up cold and hungry to the rendezvous all through the night, felt at finding that the ash-trees, common to the neighbourhood, would burn with ease, though green. This was a novelty to them, coming mostly from Somersetshire, where there is little wood but the elm, which burns with difficulty, even when dry.

THE SOCIETY have to deplore the demolition, within the last few months, of the remains of the *Old Priory* (as it is generally believed to have been) at Keyford. The committee are however enabled to give an engraving of the same, from a drawing by Mr. C. E. Giles, with a short descriptive notice, in the second part.

Second Day.

THE second day was devoted to an excursion for the purpose of visiting the objects of archaeological interest in the neighbourhood. A party of nearly a hundred met at the village of Nunney, three miles from Frome, and inspected the ruins of the old castle; in the midst of which Mr. C.E. GILES communicated such information as had been collected by Dr. HARRISON respecting the history of the building. The substance of the communication will be found in the second part, accompanied by a view of the castle in its present state.

The remains of a Roman Villa, at Whatley, were next visited. A cold collation had been provided on the spot by the hospitable proprietor, Mr. Shore; by whose courtesy the society is presented with the subjoined copy of a letter from the pen of the late Rev. John Skinner.

(Copy.)

Camerton Parsonage,
September 10th, 1838.

Dear Sir,

Last week when staying at Southfield House I availed myself of the opportunity of visiting the Roman Pavement you have had opened on your property. And was much interested by what I saw, and the anticipation of future discoveries, for there can be no doubt, that the villa was far more extensive than what is already laid open, and that it was accompanied by other buildings of the Romans in the immediate vicinity, as well as of the Britons; for the linchets in the adjoining field, and the name of that *field*, *Chessil*, or *Chedsil*, prove to demonstration the prior occupancy of the Britons; and that this in

their time was an out-post on the line of road between Tetbury, then an important settlement of the Belgic Britons, and Postlebury Hill another stronghold on the line of the *Portway*, which ran from *Uphill* on the Severn in this direction, and passing over *Gearhill*, the Somersetshire boundary, ran to Sorbiodunum or *Old Sarum*, (another Belgic British settlement) from thence to Winchester,—the *Venta Belgarum* or seat of the Belgæ, near the water, and thence to the capital of the Iceni on the Southampton water—where the trading vessels of the Belgæ of Gaul took their freight of the produce of the British mines in Cornwall, Devon, and Somerset to convey to the continent. I have traced the greater part of this road which communicated between the *Cangi* (a Belgic British tribe, dwelling on the coasts of Somersetshire, having the lead mines of Mendip in their possession) and the *Iceni*, another powerful British tribe, who dwelt between the rivers *Itchen* and *Anton*, on the site of the present town of Southampton. The ore when smelted in pigs was conveyed along this road on the backs of horses, two of them being a load for the larger class of animals then employed, and one for the smaller. (N.B. one of these pigs, probably cast on Mendip, is now in the Bath Institute, having on it the name of the emperor Hadrian, being his tribute from the mines). By taking this road, about 80 miles across between the two channels, the tedious and difficult navigation of the Severn was avoided, for before this mode of traffic was adopted, the vessels employed in it coasted round the Land's End and up the British Channel to the Isle of Wight, where the first depot of the metals was established. The Romans when they had dispossessed the Britons of their lucrative commerce carried their road on the line of the British track-way, and by this road was all the produce of our mining

districts conveyed across the island. The Romans living in the vicinity of this road had also an opportunity afforded of sending the produce of the metals smelted by their slaves, for in all the villas that I have here seen the *scoria* of iron and lead are found contiguous to the villas, and some I saw at yours. As you extend your discoveries you will meet with greater quantities, also the flues where the ore was smelted, and I doubt not discover the baths and hypocausts. That every success may attend your laudable endeavours in bringing to light the operations of a great and justly celebrated people, who had so large a share in the civilization of Europe, is the sincere wish of

Yours truly,

JOHN SKINNER.

To Mr. J. Shore.

The anticipations of the learned writer have been realized by the recent discovery of the baths and hypocausts. The committee are not furnished with sufficient materials for presenting a full account of these interesting remains, which afford scope both for the pencil and the pen. They trust the task will be undertaken by some member of the society, and that they may present the result in a future volume of the society's proceedings.

In passing through Orchardleigh Park, some supposed Druidical stones there attracted attention and inspection. On emerging from the park through the Gloucester Gate, the party found itself in the midst of the secluded village of Lullington. A paper on the church, by the Rev. Malcolm Clerk, was read in the churchyard. The committee hope to present the paper with illustrations of this little gem of Norman transition work, in a future volume.

In closing this notice of the third quarterly meeting,

the committee feel it a pleasing duty to acknowledge the unbounded hospitality of the friends of the society at Frome. Every gentleman opened his house to the strangers, and placed his carriage at the disposal of the committee, so that no visitor incurred any expense during the two days beyond that of going thither and returning. They have the further pleasure of acknowledging the assistance and co-operation of the Frome Literary and Scientific Institution in furthering the objects of the meeting. It is no longer a matter of doubt that the society has taken root in that part of the county.

The Museum.

THE following list comprises most of the objects of interest exhibited at the meeting at Frome, with the names of the depositors.

By the Rev. E. Dighton.—Specimen of Wood Carving, Foliage, Flowers, &c. Bronze Horn. Painting on Alabaster. Daguerreotype view of the leaning Tower of Pisa. Small Painting on China.

By Mr. J. Paget.—Metal Screen and Stand. Silver-mounted Cup of Cocoa Nut. Egyptian bronze Lotus Vase. Antique Watch and Etui. Manuscript Bible. Metal Figure, bronze. Roman Lares. Bronze Seal. Three engraved Pilgrim Shells. Ivory silver-mounted Box, once the property of Mary Queen of Scots. Missal, illuminated. Roman Pondus, dug up at Bath. Box containing Shirt and Combs of Charles I. Bronze from Ragland Castle. Casket filigree work.

By Rev. H. D. Wickham.—Two handed Damascus Sword. The Jones's Pedigree. Indian Dagger. Box, shell and wood inlaid. Gold and Silver Medals. Original Miniature of Cromwell. Locket Miniature of James II, worn by the Jacobites. White Cornelian Engraving by Pixler. Antique silver gilt Smelling Bottle. Fossil from Keyford, Frome. Illustrated Bible, 1680. Two trays of Coins.

By Rev. J. H. S. Horner.—Brooch found in the neighbourhood of Mells. Toy Matchlock. Key with Ring and Seal attached. Ancient Seal found at Mells. Five Indian Seals. Map of *Minedeep Forest.* Twelve Coins from Italica, Spain. Celt Hatchet.

By Mr. W. C. Cruttwell.—Silver Cream Pail of Dr. T. Wilson, Bishop of Sodor and Man.

By Dr. Harrison.—Bronze Inkstand. Chinese Painting.

By Rev. W. B. Calvert.—Bp. Kenn's Communion Service.

By Rev. E. Edgell.—Vases purchased in Italy said to be from Herculaneum. Medal, Charles I. Royal Seal and Coat of Arms,—the seal an official one of Mr. Folkes, who held a confidential office about James I.—the Royal Arms of the same monarch.

By Rev. E. K. Lutt.—Two Battle Axes.

By Mr. W. P. Penny.—Antique Silver Clasp. Original edition of Walton's Angler. Copy of Antique Sun Dial. Two carved Goblets of Cocoa Nut.

By Mr. Singer.—Gold Ring found at Pompeii. Old Carving found at Heath House, Corsley.

By Mr. T. B. Sheppard.—Vertebræ of the Icthyosaurus.

By Miss Sheppard.—Saxon Ring found at Whatley. Fragment of old Urn found in old British burial place in the garden at Fromefield. Ancient Silver Medal,—obverse Crucifixion,—reverse, Brazen Serpent. Silver Medal, Family of James I.

By Mr. Wickham.—Two Ivory carved Antique Boxes. John Nider of Nuremberg, Sermones Aurei, 1479. Mrs. Elizabeth Rowe's Common Place Book. Psalterium, illuminated.

By Rev. H. Clutterbuck.—Three Numbers of Muscologia Nottinghamiensis.

By Mr. J. N. Highmore.—Nineteen silver and copper Coins.

By Rev. D. M. Clerk.—Mummy Effigy. Engraved Stones from a Mummy Case. Ring from a Mummy Case. Isis Horns, Napthys an Egyptian Trinity, &c. &c. From Egypt, Roman work used as a Strigel. Chain from a Mummy Case. Relic from Flodden. Seal of Clothworkers of the County of Kent. Five Ancient Seals. Seal of the Bishop of St. Asaph, 15th century. Lamp from Egypt, Roman work. Mummy Figure and Hieroglyphics.

By Mr. W. H. Sheppard.—Grafton's, Hollingshed's, Fabyan's, Caxton's, and Hall's Chronicles. Coverdale's Bible, Chaucer's Works. Manuscript of Bracton. Tray of Coins, some Saxon. Medals, Rosary, Pattern Coins.

By Mr. Baverstock.—Facsimile of Magna Charta and Sword.

By Rev. T. F. Dymock.—Seven silver, four copper Coins.

By Rev. W. B. Tritton.—Ancient Register from Cloford, about 1560.

By Mr. Shore.—Box of Relics from Whatley. Crucifixion and Carved Relic.

By Rear Admiral Sir E. C. Strode.—Ancient Brass, Gunpowder Plot. Rubbing from a Brass, Baynton Church.

By Mr. C. E. Giles.—Impression of Seal, Abbot of Cleve.

By Mr. Bunn.—Two Bronzes.

By Mr. Sinkins.—Ivory Casket.

Second Annual Meeting held at Wells, September 17th, 1850. The Hon. and Right Reverend the Lord Bishop of the Diocese, Vice President, in the Chair.

Morning Meeting.

The Very Rev. the DEAN and other Dignitaries of the Cathedral were present, besides a large attendance of the gentry of the county.

The Right Rev. Chairman opened the meeting with the following address :—

"I have much pleasure in acceding to the request made me to take the chair at this meeting, but I felt that I should better render what little assistance I am able to give to this society, by putting my observations upon paper than by trusting myself to speak off-hand upon subjects in which I indeed feel an interest, but with which I must profess myself, at the outset, to be most inadequately acquainted. My knowledge of those studies which it is the object of this society to promote, is, I must repeat, most slender and imperfect. Still it does not appear to me necessary to have a full knowledge of a pursuit in order to assign it its proper value in the wide *curriculum* of human learning. *That* must, indeed, be a narrow mind, that can see no excellence beyond its own sphere, no object worthy of acquirement beyond what it has itself been able to master. Least of all, is it characteristic of the christian spirit to despise everything we cannot understand, or to value the attainments of others, *lower* than our own. *Damnant quod non intelligunt*, the principle so properly denounced at your first meeting, by one whose absence, and the cause of whose absence we must all so

deeply regret to day—the Dean of Westminster—that principle is as little applicable to the christian as to the philosopher. It is therefore more for the purpose of expressing the interest I feel in the objects of your society, than from a hope or intention of adding anything to your information, that I venture to make any remarks at all before you to day—but dead, indeed, should I be to all that is wonderful in nature, or beautiful in art, if I could dwell amid the caves of the Mendip, and the ruins of Glastonbury, and the still-perfect glories of my own cathedral, and I may add, the beautiful remains of human skill and architectural proportion within the walls of my own palace, without feeling that the archaeology of nature and of art had claims, if not upon my studies, at least on my interests and affections. Still, I feel sure that there is no one here who would wish me to view these subjects otherwise than as subsidiary to that greatest of all wisdom to which my spiritual office mainly directs me; and I would wish you, in like manner, to remember all along, (what indeed the character of my observations will of itself remind you of,) that it is *not a professor* or a *savant*, but *your Bishop* who speaks to you. The time, I trust, is come, when it is as unnecessary to defend the pursuit of Natural History from the imputation of irreligion, as the study of antiquity from a tendency to trifling and superstition. Still, there may even now be evils, into which a too exclusive devotion to either study may lead its votaries, and which it may not be out of place for one in my position to recall for your warning. Yet one chief excellence in both pursuits, I would first most gladly dwell on, which indeed may be overlooked by beginners and by those who have only a little learning, but which, I am convinced, is the great lesson to be learnt, (and which *will* be learnt,) by all who

enter deeply and with a right spirit—a pearl missed by those who dive shallowly, but treasured as of greatest price by all who have most profoundly fathomed the depths of learning. And that lesson is the lesson of humility. Whether we view the workings of the Almighty's hand in the minutest of the creeping things under our feet, in the lowest hyssop on the wall, in the cedar forests, or in the mountains on which they grow, in the stupendous ruins of early creations now passed away, or whether we view the handicraft of *man*, in the massive columns, the lofty arches, the delicate tracery, the skilful groining, the exquisite sculpture, (of all of which this city and neighbourhood furnish such rich examples,) there is but one and the same lesson of humility to be learnt. Not that we are for a moment to compare the *degree* of humiliation which we must feel in one case and in the other; but, still, as the contemplation of the one must make us feel how little we are in the sight of God, so must the other make us confess how little we are in comparison with our forefathers. Here then, at the outset, is an advantage to be gained from the right pursuit of these studies—higher than the highest result of their own subject matter—higher than the most glorious achievements of human science and art. Yet it may be feared that these studies have not always thus brought into the obedience of Christ the thoughts and affections of all those who have devoted themselves to their pursuit. In natural science this appears to me greatly to have resulted from the narrow and confined view which naturalists have themselves taken. It is true that such pursuits are no longer carried on in a spirit, nor are they considered in their results antagonistic to christianity; but are they not too often conceived as something altogether separate?—made a thing apart? Is not the naturalist too apt to frame to himself a religion of

his own out of purely natural elements, and then to look upon the Christian faith as something merely supplemental, which may be combined with it, or not? Is he not apt to look upon the natural objects around him and draw from them the evidences of the goodness and power of God, and *stop there.* And yet can he *honestly there stop?* Proof, undoubtedly, he will find on every side, of God's abundant mercy. He will find the strata of the earth, and all the productions that grow thereon, so disposed as to be most convenient for the use of man,—he will find marks of design and providence in the meanest creature that moves upon its surface, power in the floods and in the lightning, glory in the sun and in the stars—goodness in everything! Even the very lilies of the field, blooming beside his path and home, seem placed there but to gladden man's eyes and heart. But is this *all* that he will see there? Will he not also find traces of ruin and of wrath? Will not the same rocks that furnish him with materials for his house and his hearth shew him also marks of destruction and of death? Does not the same electric burst that purifies the atmosphere, bring destruction often upon the lowly cottage and the innocent cattle? Do not those birds, those beasts, those fishes, from which the naturalist draws so many proofs of the Almighty's providence and mercy, prey upon one another, inflicting a cruel and premature death?—do not the floods *overwhelm?* and does not the sun scorch? Do not flowers fade?—do not some poison? Can we understand the stars? Are there then not signs of mystery, of sin, of sorrow, of pain, of death, in the natural world? and can the philosopher blink and overlook these things? And yet how are they to be reconciled with an all-merciful Creator, except it be the God of Revelation, the God of the Bible—that Almighty Creator, who, manifesting him-

self to us as our "*Redeemer*," tells of *wrath cancelled*—as our "*Judge*," of *sin condemned?* It is well, I think, to dwell on this consideration, (so often overlooked by the mere naturalist,) that no honest research will leave him in a clear and consistent scheme of natural religion, apart from the faith of the gospel. He will indeed be left in yet greater difficulties, and perplexities, and mysteries, than when he began—difficulties and perplexities which can alone be cleared up, mysteries which can alone be, not solved, but accepted, by a belief in the revealed word of God. In archaeological pursuits, which claim probably the interest of the greater number of the members of this society, whatever danger there may be, is supposed to be rather in the opposite direction. The objection to archaeology as a trifling and useless study being now abandoned, the graver charge of its reviving abandoned superstitions, and creating a hankering after things condemned and forbidden, has been brought against it. And certainly that temper of moderation and forbearance,—that discriminating liberty of choice in choosing the good and refusing the evil, which under her motherly care and direction, our church has always allowed her faithful children—is nowhere more required than in the study of the arts and usages of past ages. For if in archaeology—(and I speak here with particular reference to what in this country must be the chief era—*the middle ages*, and that province which necessarily presents itself most conspicuously—its architectural objects, and those especially of the church), if, I say, in archaeological researches in this quarter, the subject is entered into in the mere dry letter of antiquarianism ; if churches are to be examined in no other spirit than that in which we might contemplate some ancient barn or some heathen temple ; if the motives of the

founders, the uses to which different parts were designed, the symbolism of their form and ornament are to be ignored and despised—then, it appears to me, the labours of its students will result in little more than the unrelieved tediousness of a museum catalogue. But if, on the other hand, we enter on the study with a blind admiration of every object and usage that presents itself; if everything is to be deemed beautiful and perfect merely because it is *old;* if we will not admit that the ancient architects ever committed a fault in construction or proportion; if we make no allowance for lapse of time, for changes in ritual and ceremony, for the new acquirements and habits of society—then, with equal folly and more danger, we are turning our light into darkness, and laying a snare for our judgment—it *may* be for our *faith*. But there *is* a spirit, at once reverential and enlightened, with which these subjects can best be entered into, and which, indeed, appears to me most remarkably to have characterized its most successful students. If we pursue the study of church architecture, for instance, in the same spirit with which Mr. Bloxham and Mr. Markland (and I the more gladly mention these names as being those of *laymen*, and the latter as one which has, in this diocese and on the church at large, the greatest claim to have good witness borne it); if, I say, we follow in the track and in the spirit which those two faithful sons of the church have pointed out to us—then we can hardly fail to have our hearts warmed, as our minds are strengthened; we shall be led not only to admire, but to emulate the works of by-gone days—to discriminate the pious motive from the superstitious use—the beautiful from the monstrous—the living from the dead—that which is temporary and conventional from that which is unchangeable and eternal. I feel I have

detained you too long, and I feel how imperfectly I have developed the ideas which the meeting of this society has suggested to me. I trust, however, that I have said enough to prevent them being *misunderstood*. To have fully explained them would have been to have occupied more time than the whole which can be devoted to papers and remarks far more valuable than my own. I will conclude, merely with wishing prosperity to this society, and expressing the pleasure it has given me that it has honoured this city with its meeting ; and I would only now impress upon its members, especially its younger ones, to remember how much of the success of their pursuits in either branch of nature or of art—(and indeed the principle will apply *to far higher interests than these)* depends *upon the careful and faithful attention to small things* and on *combining an appreciation of the present* with a *reverence for the past*. Thus followed out in a spirit of *thankful humility*, these pursuits may tend as much to the *glory of God* as to the *good of man*.

The Rev. T. F. Dymock then read the Report of the Committee for the year, as follows :—

" In pursuance of their design, of accumulating facts and inviting correspondence with persons in all parts of the county, your Committee have issued series of questions on Archaeology, Ecclesiastical Architecture, and Botany. These last have drawn forth but few replies, but in the two first subjects they have received returns from twenty parishes some of which furnish very complete information, and others which are very defective may not be without use as serving to indicate in what cases it is worth while to make further enquiries.

" Three quarterly meetings have been held—in January April and July—at the towns of Taunton, Bridgwater, and Frome, at which papers have been read, and oral commu-

nications made, on both the subjects which the society takes in hand. It is proposed, with the permission of the contributors, to select from these such portions as may seem suitable for publication, and may be sufficient to form an 8vo. volume; and it is intended to illustrate this publication with engravings on copper or wood of the following objects;—Nunney Castle; Lullington Church; the old Market Cross and Bridge at Bridgwater, both now removed; remains of ancient sculpture, from St. Cuthbert's Church, Wells, and from Wellington Church; Saxon and early English coins struck in the county.* Papers of a general nature, not relating to this county more than any other, though at the time of reading they afforded so much gratification and instruction to the auditors, they have no intention of committing to the press.

"The original rules of the society provided for one anniversary and three other general meetings, to take place quarterly, with the understanding that these last should be held at the head quarters of the society, and that the anniversary meeting alone should be migratory. It was, however, subsequently resolved to make all the meetings migratory, and to this resolution the committee have adhered. But their experience of the past year having shewn them that one meeting in each quarter is likely to prove too great a tax upon the time of those who carry on the business of the society, as well as of those who contribute to its amusement, they now recommend that meetings shall be held only twice in the year—the anniversary meeting at the usual time, and another in the summer quarter, when the length of the days and the weather are favourable for an excursion.

* The Papers on Lullington Church and the Sculptures from St. Cuthbert's Church, Wells, with the illustrations, are deferred, and other subjects take their place.

"The committee have made an arrangement with the Taunton Literary Institution, by which they obtain the use of their large room, the loan of their museum and a portion of their library, upon payment of half their annual rent. They have also united with them in securing the services of a curator upon similar terms. These arrangements cost the society £50 a year.

"They have received many gifts and deposits of books, fossils, coins, and other objects of antiquity and natural history, which, together with the collection of the Taunton Literary Institution, form the nucleus of a museum in that town. Members have been invited to make deposits on loan, that in case this society should not continue to flourish as we have every reason to expect it will, they may have the power of withdrawing them, and placing them where they are more likely to be of use. A list of all gifts and deposits will be added to the projected publication.

"The committee have not thought themselves justified in laying out much money in the purchase of objects for the museum or library. They have, however, procured a few books and a collection of sulphur casts from ancient seals. They have given a subscription in aid of the researches of the British Natural History Society; in return for which they have received a collection of fossils from the tertiary beds of the Hampshire coast, and are to receive others from the mountain limestone of the North of England and Ireland, and they have also made a grant of £5 to aid in uncovering some remains of a Roman villa in the parish of East Coker. In conclusion, the committee venture to congratulate the members on the establishment and fair prospects of this society. It has been in existence only 18 months, and consists of more than 300 members. It has been favorably received at three of the principal towns of the county. They believe that a spirit of enquiry has

been excited and will spread, and hope that if your society attain to nothing higher, it will prove a useful hand-maid to some of our great British societies which have similar objects in view, gathering up for their use, out of our portion of the kingdom, such fragments of information as they, in their wider researches, may be constrained to overlook, and making our small contribution to that mass of facts which forms the sure ground on which is based all real advance in literature and science."

Mr. BADCOCK, the treasurer, presented his report, an abstract of which is subjoined, viz. :—

The Treasurer in account with Somerset Archæological and Natural History Society.

Dr.				Cr.			
1850.	£	s.	d.	1850.	£	s.	d.
Subscriptions to 31st December, 1849	112	10	0	Disbursements connected with organization of Society, &c.	70	16	8
Donations to ditto	18	10	0	Printing and Stationery	60	15	9
Entrance fees to ditto	112	10	0	Books, Maps, Casts, &c.	15	15	10
Subscriptions for current year	57	10	0	Cases, Furniture, &c, for Museum	30	7	2
Donations for ditto	21	0	0	Rent, &c. to Midsummer last	43	9	0
O. Lasbury	0	6	3	Contribution towards alterations in Museum Room	20	0	0
				Curator, Quarter's Salary	6	5	0
					£247	9	5
				Balance	74	16	10
	£322	6	3		£322	6	3

R. G. BADCOCK, Treasurer.

On the motion of Mr. DICKINSON, seconded by the Ven. Archdeacon BRYMER, the reports were adopted.

Mr. BAKER then read a paper *on the Marl Pits* of Somersetshire, which had been entrusted to him by the Rev. Mr. Poole, of Enmore, who would have been present had not the infirmities of age prevented him. The paper referred principally to the pits on the eastern slopes of the

Quantocks, where they are so numerous that within less than a mile from Mr. Poole's residence, there are more than forty ; coloured drawings of some of which were exhibited. They vary in diameter from thirty to sixty feet, and differ very much in depth. More than fifty years ago, during a a very dry summer, he had one of them emptied. The water was got out easily, the deposit with more difficulty, and at last he had the pleasure of standing on the bottom. Many opinions had been formed respecting the object of these excavations. He thought the most probable was, that the pits were dug, many ages since, to obtain clay to alloy the rich vegetable surface soil, when the ground was first cultivated after the clearing of the primeval forests.

Mr. MARKLAND then addressed the meeting on the sculpture of the west end of Wells Cathedral, and read some communications which he had received from C. R. Cockerell, Esq. R.A. He (Mr. Markland) deeply regretted the absence of that gentleman from the present meeting, a feeling in which all present would participate, especially when they heard that it was caused by severe indisposition. Knowing the great attention which Mr. Cockerell had paid to these remains of ancient art, and having had the benefit of hearing, last year, at the meeting of the Archaeological Institute, at Salisbury, a very able paper on the sculpture of that Cathedral from the pen of Mr. Cockerell, he (Mr. Markland) had felt anxious that the members of the Somersetshire Archaeological Society should have been similarly benefitted by listening to remarks from Mr. Cockerell's own lips, on the present subject.

Mr. Cockerell, in his first letter, dated, " Bank of England, 4th September," says, " I am much honoured and gratified by your note and proposition of yesterday, regarding our beloved Wells, which, without any extreme or enthusi-

astic view, I must ever consider as the most interesting historical monument of the middle ages in Europe. It would give me sincere pleasure to wait on the Somerset Archaeological Society, at Wells, on the 17th, if my health would permit; at all events, I shall hope to offer you some notes on the subject, which will suffice to present the chief fruits of my delightful studies on that precious monument. I shall be very curious to know which of those ascertained personages has recently fallen from his niche, as I hear through the papers." [This was the statue of Edward the Elder, a very fine one. Fortunately, Mr. Cockerell has preserved a drawing of it.] "Professional and peremptory engagements have indeed sadly deferred my proposed publication—the forum and the muses are ever adverse in their occupations. Meanwhile, the contemplation of these noble illustrations of our ancestors enhances greatly their merit and informs the artist's eye; here indeed, as at Lincoln, sculpture assumes a grace at once poetical in conception and in execution,—approaching the fairest times of Greece in idea—and far and deeply exceeding them in affecting Christian interest; and of course in national feeling." In a subsequent letter, dated 13th September, Mr. Cockerell wrote, "I am not sure whether I mentioned in my letter, that I have been for some months an invalid. Your agreeable letter, and the hope of visiting my beloved Wells, in such learned company, probably dismissed my griefs for the moment; but a relapse since then, and the strenuous advice of my medical advisers, forbid the great enjoyment which I had promised myself in explaining my view of the admirable works of Bishop Trotman; and I must limit my services to the transmission of the pictures of the west and east and north fronts; and their catalogues; and some of the statues as ensamples of the whole; eleven sheets in all;

which I will direct to you at Longleat this day, with the request that you will kindly submit them to the consideration of the meeting, and trusting that they will oblige me with any observations or criticisms which may occur to them. The letter-press already printed is too confused to trouble you with. The catalogue of the statues, and the recognition of the grand scheme, must suffice; comprehending, as it does, the great doctrines of the faith, according to the Hymn of St. Ambrose, the Te Deum,—a religious homily in stone—and at the same time, an exhibition to the unlearned, of those spiritual and temporal Princes, who during 500 years had protected and advanced the faith, and the interests of Holy Church. This is the interesting point for the contemplation of all observers, and the chief contribution I have to offer; and I cannot doubt that all who accept it will then agree that no monument in Europe, ancient or modern, has ever embodied so magnificent and glorious a scheme. In the nine tiers of sculpture we have, first, nearest the ground, the foundation of all, the Prophets and Apostles. "The glorious company of the Apostles praise Thee." In the second, the Angels in Praise—"To Thee all Angels cry aloud." In the third, the history of the Creation, to the Patriarchs, and the New Testament—"the Holy Church, throughout all the world, doth acknowledge Thee." In the fourth and fifth, the historical tiers (so deeply interesting), may be included in this "Holy Church," and this may be deemed the continuation of the WORD, from Moses to Augustine, and thence to the time of Bishop Trotman. The sixth, seventh, eighth, and ninth, illustrate our belief, "That Thou shall come to be our Judge," in the presence of the Apostles, the nine Angels, and the Resurrection—subjects full of pathos and expression. Over the door, we are reminded—"When Thou tookest upon

Thee to deliver man, Thou didst not abhor the Virgin's womb." See also, in the soffete of the arch, the Ten Commandments. The historical tiers (a surprising series) will be found of the deepest interest, and the learned will not fail to recognize, for example, on the spiritual side, Ina, the first Founder; Edward the Elder; the five Archbishops, translated before 1200, from Wells; Brithelmus, especially, *holding his Pallium*, and yielding it to king Edgar; the Bishops of Sherborne and of Wells. While on the temporal side,—Edgar without his crown; Athelstan; Alfred in the centre, the sun of this galaxy; Ethelfleda, withdrawing the nuptial ring from her finger, &c., &c. In the north, Edward the Confessor, William the Conqueror, and Robert Courthose, *lifting up his cloak to shew you his short legs*, and others. All these, as proofs of identity, together with the regular succession which the catalogue exhibits, and the many other evidences the observer cannot fail to acknowledge, will, I think, satisfy every reasonable person of the correctness of my interpretations, the subject of so many long and delightful visits and contemplations at Wells. It is deplorable injustice to offer you such a hasty description, written in my office to catch occasion, on so noble and glorious a work, involving the most interesting of all subjects, and, to a Saxon Englishman, of all histories; but to the learned and ingenious *verbum sat;* and I am sure you will on reflection do as much, perhaps more justice to this extraordinary work than I could myself.* Mr. Parker is my publisher, and any subscriber may obtain from him the copies which I hope

* This compliment is entirely disclaimed. Having access to the drawings only two days before the meeting, and being then absent from home and my own books, I could not prepare any observations on this interesting subject in any way worthy the attention of the society.

shortly to issue. I grieve to hear of the fate of Edward the Elder, which is indeed ominous, as the founder of the Episcopal Church of Wells,* and I earnestly hope the fragments are preserved and have not suffered much. It would be scandalous to leave it unrestored.† Pray offer my respects to your meeting, and my excuses for so jejune a description of the pride of Somersetshire."

In a later communication Mr. Cockerell said, " For those who observe the court calendar, Wells offers a very curious Peerage. Beside Henry II, in the north front, is Alicia, his

* " Plegmundus tandem Cantuariensis cum anno 905, septem simul ordinaret Episcopos quorum tres in sedibus novis tunc erectis per Edwardum seniorem Regem sunt collocati ; Adelmus Abbas Glastoniensis in Episcopatum Wellensem consecratus est. Adelmus igitur Episcoporum Wellensium primus fuit, qui cum annos sedisset decem, ad Archipraesulatum Cantuariensem hinc translatus est."—Godwin by Richardson, p. 364.

" We have the number of seven bishops consecrated together by Plegmund ; and as for the time, we must take Radulphus de Diceto's account, who fixes it to the year 909. The names of the consecrated prelates were, Fridstan, Bishop of Winchester, Werestun of Shereburn, Kenulph of Dorchester, Beomock of Selsea, Athelm of Wells, Eadulph of Crediton, or Kirtan in Devonshire, and Athelstan of St. Petrox, or Padstow, in Cornwall. These three sees last mentioned were newly erected." Collier's Ecclesiastical History, vol. i. p. 404.

Thus we see that, in the 10th century, a larger number of Episcopal Sees existed in the South Western parts of England than are to be found in the 19th. The episcopal See of Dorchester was in Oxfordshire, not the capital of the County of Dorset.

† This statue was, I am told, literally dashed to pieces, and it is much to be feared, that if due care be not speedily taken, several other statues will be sacrificed. It is earnestly hoped that the dean and chapter and the gentlemen of the county will come forward, and that a *special subscription* will be entered into for their preservation. The slender shafts, formerly existing at the angles of the two centre buttresses, should be replaced, not only in order that the buttresses themselves may harmonize with the rest of the building, but that the statues in those particular spots may be the better guarded.

second queen, the mother, *fons et origo*, of '*all the Howards.*' Robert, the old Duke of Normandy, and Fulke, Earl of Anjou, are above, in the same front. Genealogies were dear to Trotman and his coadjutors, as they are to us now, so long as the stem and branches bear worthy fruits."

Mr. Cockerell's conception of, and his explanation, in the foregoing letters, of this noble specimen of ancient art—so grand in its design and so beautiful in its execution—will lead us hereafter to regard this cathedral with heightened feelings both of reverence and admiration.

Bishop Trotman, the Prelate to whom we owe this great work, is better known by his more dignified and euphonical name of Joceline of Wells. He was consecrated Bishop of Wells 1206, and having filled the see more than thirty-seven years, died in 1244. He may be regarded as the Wykeham of the diocese over which he presided.

"Ecclesiam ipsam Wellensem jamjam collapsuram egregie refecit ac restituit, vel potius novam condidit. Nam partem multo maximam, quicquid nimirum presbyterio est ab occidente, demolitus est, ut cum ampliorem tum pulchriorem redderet, structura excitata ex polito lapide affabre insculpto, augustissima et spectatu dignissima."*

Henry III, the monarch in whose reign Bishop Joceline flourished, is said to have been the first English king who displayed in a remarkable degree a taste for architecture, sculpture, and painting. To the rebuilding and restoring of the royal residences, and to the decoration of them we are told that he paid minute attention.† As he doubtless fostered similar tastes in some of his subjects, Joceline

* Godwin de Præsulibus Angliæ, by Richardson, p. 371.

† Mr. Botfield's "Manners and Household Expenses of England in the 13th and 15th Centuries." Introduction p. lxxiv.

may have partaken of the royal influence. Flaxman notices especially the zeal and success with which sculpture was practised at this period. Amongst the works best known is the chapel of Edward the Confessor in Westminster Abbey, a building of singular beauty. In that chapel is placed Henry's own tomb, with those of his eldest son Edward I, and of Queen Eleanor, the first wife of the latter. The tombs of Henry and Eleanor have been frequently the subject of praise for their exquisite beauty, and, to use Flaxman's words, well deserve our respect and attention. The marble work of Queen Eleanor's tomb is said to have been executed by Richard de Crundale. The statue, which is of metal, originally richly coated with gold, was the work of Master William Torell, who doubtless executed the adjoining tomb of Henry III.*

We gather from the above and other sources of information, regarding the memorials of conjugal love, which Edward I. raised in honour of his beloved queen, that at this period England possessed native artists competent to execute the finest works, and that a resort to the continent for a supply of such persons was therefore needless.† The fact is here mentioned, as we shall doubtless regard the sculpture at Wells, and on our other cathedrals with additional interest, if satisfied that it is the work of English artists.

To return to the sculpture at Wells, we find that Flaxman, equally with Mr. Cockerell, appreciated these works of art, and the criticism of that distinguished sculptor well deserves our attention. Referring to the west front, he speaks of it

* Mr. Hunter's valuable paper on the death of Queen Eleanor, Archæologia, vol. xxix., 190. Stothard's Monumental Effigies, p. 32.

† "Manners and Household Expenses, &c.," ut supra, lxxviii.

as evincing both "the piety and comprehension of Bishop Joceline's mind; the sculpture presenting the noblest, most useful and interesting subjects possible to be chosen." Flaxman admits however that "the work is ill drawn and deficient in principle, and that much of the sculpture is rude and severe: yet, that in parts there is a beautiful simplicity, an irresistible sentiment, and sometimes a grace, excelling more modern productions."*

After enumerating several of the subjects,† he continues, "Wells was finished 46 years before the cathedral of Amiens, and 36 years before the cathedral of Orvieto was begun; and it seems to be the first specimen that is to be found in Western Europe of such magnificent and varied sculpture, united in a series of sacred history. It is therefore probable that the general idea of the work might be brought from the east by some of the crusaders."‡ This appears a natural conclusion. The return of the crusaders "brought a taste for Grecian art, which was then visible wherever they had marched. The church waxed strong, rich, ambitious, and desirous of splendour. Magnificent abbeys were built, and the whole skill and genius of the land were employed in embellishing them with traditions of the saints, and legends of the church. In the days of the third Henry, the desire to excel seemed universal, and many works of true genius adorned our cathedrals. The creation, the deluge, the nativity, the crucifixion, and the resurrection were designed with a feeling at once scriptural and imaginative. Over the works of those days were scattered much good sense, right feeling and simple grace, which redeemed the imperfect workmanship."‖

* Flaxman's Lectures on Sculpture, p. 39.

† Of three of these he has given engravings,—1st the creation of Eve; 2nd the death of Isaac; and 3rd what is called an angel, but which is doubtless the figure of St. John the Evangelist.

‡ Lectures ut supra, p. 40. ‖ Quarterly Review, vol. xxxiv. p. 121.

Amongst other disadvantages under which this work was produced, Flaxman observes, " there were neither prints, nor printed books to assist the artist ; the sculptor could not be instructed in anatomy, for there were no anatomists."* This must be received with some qualification, for though in the middle ages the knowledge of the human frame was probably very limited, yet our sculptors, many of whom may have travelled, must, as men of observation, have availed themselves of every opportunity of gaining knowledge, and was it possible for them to have acquired the grace observable in many of these groups and single figures, especially in the female form, without some anatomical knowledge of the human frame? Early medical writings, though not generally accessible, may have become familiar, from their contents being quoted, and they may have given hints both as to proportions and outline. In Mr. Winston's able work on a sister art, are some valuable remarks which closely apply to the present subject.

" Notwithstanding their rudeness, and defective drawing, the early English figures in general possess great merit—simple and unaffected, they are often grandly conceived, though they may be imperfectly executed through the artist's want of technical skill. A deep and lively feeling often pervades the entire figure ; and its countenance, though frequently distorted and exaggerated, is apt to exhibit both expression and character, in a far more striking degree than is usually the case with later works. The early English artists were particularly happy in their representations of deified and sainted personages ; the peculiarity of the style, as shown in the formality and severity of the countenances, and the stiff and unnatural character of the draperies, contributing to produce a solemn effect well suited to the subject."†

* Lectures ut supra, p. 39. † Winston on ancient glass painting, p. 48.

With very limited opportunities of forming a judgment on continental buildings, Mr. Markland remarked that the only cathedral which had occurred to him, bearing any resemblance in design to the façade of Wells, is a portion of the cathedral of Burgos, which, vast and magnificent as it is, combines the greatest irregularities, with the greatest beauties. On "the portal of the Apostles" may be observed in the lowest tier, the twelve Apostles. In three upper windows nine figures form the lower part of the mullions, somewhat after the fashion of Caryatides. This portal is said to belong to the second epoch of the gothic style, viz., the thirteenth century, the period under our consideration.*

Mr. Markland could not but congratulate the Society on the auspices under which they met that day, graced as the meeting was by the presence of his lordship in the chair, and by the highest civil and ecclesiastical authorities of the city and its cathedral. If asked whether associations of this kind were calculated to be beneficial, we need not speak theoretically, but may refer to facts. To take one instance: the last report of the Yorkshire Architectural Society stated, that "the good which has been already effected by that Society and the *kindred Institutions* is already apparent on all hands. It would be impossible even for a casual observer to traverse the county without being sensible of increasing attention being bestowed on its ancient architectural remains, and of the improved aspect and ecclesiastical character of the newly built churches."

Had these Societies existed earlier, how many precious relics might have been preserved—how much mischief in

* I am indebted to George Vivian, Esq., of Claverton, for the opportunity of consulting a magnificent, and in this country, a *very* rare work, entitled "Espana artistica y monumental, par Don Gerano Pirez de Villa-amil, et Don Patricio Escosura." 3 vols. folio, Paris, 1842.

the miscalled work of restoration might have been avoided —and how much money, expended solely in doing mischief, might have been judiciously applied. Regrets are now vain and useless, but the recollection of these sad proceedings should stimulate us to more strenuous efforts in preserving in their integrity, as far as it is practicable, those beautiful specimens of ancient art which we still possess. He would refer to a very interesting antiquarian work, just published by Mr. C. Roach Smith, and beautifully illustrated by Mr. Fairholt, entitled "the antiquities of Richborough, Reculver, and Lymne in Kent." Speaking of the church lately standing at Reculver, the author observes, "this church possessed especial claims for preservation. It stood as a monument of the downfall of paganism and the triumph of christianity. Upwards of a thousand years our forefathers had preserved, endowed, and repaired it, and generation after generation had called it theirs, and within its walls had ratified the obligations of social life; they had died and were buried about it. Tradition hallowed it as the burial place of Ethelbert, who received and protected Augustine; monuments of the ancestors of rich and influential families, whose near relatives also lay there interred, stood within and around its walls. The church at the commencement of the present century, though it had been neglected and was dilapidated, might have been easily repaired; *but the gentry and clergy abandoned it to jobbers and speculators, who seized upon the venerable pile, tore it to pieces and divided the spoil.* The old people, who remember the circumstances, tell, how the bells fell to the share of one, the lead to another, recount the prices at which the materials were sold, and relate how, ere long, the curse of heaven fell on all the destroyers of the church, that nothing prospered with them, and that at last they and their families came to misery and ruin."* So

* Page 200.

disgraceful an occurrence (Mr. Markland remarked) would not be permitted to take place, nay, would not be *thought* of, in 1850.

Seventy years ago, Dr. Johnson lamented, and with too great reason, that our cathedrals "were mouldering by unregarded dilapidation." Could he now walk into the beautiful pile, adjoining that hall, what a favorable change would he witness in marking the zeal, skill, and reverential feelings evinced in the restoration of that exquisite building.

So far from any due appreciation of our finer Ecclesiastical Buildings it seemed to have been an object, with some writers, during a long succession of years to disparage them. Even so gifted a man as Evelyn is found amongst the number. He admits that in the pointed style "there is something of solid and oddly artificial too, after a sort," but, he adds, "the bundles of staves, and other incongruous props to support pondrous arched roofs, trite and busy carvings, clumsy buttresses, towers, sharp-pointed arches, turrets and pinnacles, breaking the angles of sight, and so confounding it, that one cannot consider it with any steadiness, where to begin or end"; all these, he concludes, are "the offspring of a night of ignorance and superstition."*

No change in public taste occurred during the next half century. Seed, in a sermon delivered before the University of Oxford, in 1741, speaks of "old gothic buildings as an irregular encumbered magnificence, showing a stiff awkward state, and an ostentatious pride."†

Collinson, the historian of this county, possessed little of taste or feeling, but still we might have expected from a clergyman and an antiquary something more decorous than the following description of this exquisite sculpture—"one

* Account of Architects and Architecture, Miscell. Works, p. 366.

† Discourses, 1757, vol. i., p. 143.

whole line of the breadth of the portal of Wells is occupied by a *grotesque representation* of the resurrection in small figures, wherein are expressed all the various attitudes of the resuscitated bodies emerging from their earthly mansions."*

Gilpin who, half a century ago, was regarded as an oracle in matters of taste, displays great ignorance, as well as a want of due appreciation of the sublime and beautiful, when speaking of our cathedral. He tells us that "the cathedral of Wells is a beautiful pile *notwithstanding* it is of *Saxon* architecture"! he speaks also of "the *Saxon* heaviness which prevails still more in the inside"! not one word of praise is passed on the sculpture.

In such days can we be surprised that deeds were committed which may almost vie with the sacrilegious acts of Dowsing and his iconoclastic brethren. The adjoining church of St. Cuthbert affords pregnant instances of this fact.

Mr. Markland knew that the members of these Societies were still the subject of unfriendly comment, but he could answer for his brother members of this Society, as for himself, that *one* feeling actuated them in their labours. So far as regarded the building and restoration of churches, it was their hope and endeavour to render them less unworthy of the Great Being to whom they were dedicated, and to promote those feelings of reverence which had too long slumbered. He would say to those, who had doubted as to the propriety and usefulness of their proceedings, let them look to men like George Herbert, who could find sermons in stones, and who, it had been well observed, saw a purpose and learned a lesson, even in the minutest portion

* History of Somersetshire, vol. iii. p. 398.

of God's House.* All might conduce to holy thoughts and devout aspirations. The cleansing the building, to purity of life—the strength of the walls, to firmness of purpose and constancy in action. The christian knows well that the kingdom of God does not consist in structures of wood and stone, nor in the ceremonies performed within them, but he is also convinced devotion and praise may unquestionably be aided and heightened by the beauty of the sanctuary—"the pealing anthem and the pausing choir." Let it not then be unjustly said that we attach undue importance to these aids. In taking his leave of opponents, or lukewarm friends, he would say, in the words of a brother antiquary, on a like occasion,† "Give us but a fair trial. We desire to proceed with judgment and caution as well as vigour," and to adopt those things only which the church sanctions and approves. "When you find us devoted to frivolous and superstitious notions, deaf to the voice of reason and friendly counsel, and to the injunctions of lawful authority, then leave us and oppose us, but, remember, that the most prudent way is to join us, and direct our course."

The Rev. D. M. CLERK, after thanking the Dean and Chapter for the use of the Liber Albus and Liber Ruber, commenced reading a paper on *Wells Cathedral*, which is given in the second part.

The next paper was on *Roman Occupation*, by the Rev. W. PHELPS, the historian of Somersetshire, but the allotted time having expired, it was not presented to the meeting.

A paper on the cathedral, by Mr. BRITTON, and another by the Rev. F. GRAY, on Pilton Church, were withheld for the same reason.

* Transactions of the Exeter Arch. Society, vol. iii. part 3, p. 201; a work which cannot be too highly commended.

† Inaugural Address, by Rev. W. L. Nichols, M.A.—Exeter Transactions, vol. iii., part 2, page 21.

On the motion of Mr. NEVILLE, seconded by the MAYOR of WELLS, a vote of thanks to the Bishop was carried by acclamation, and the morning meeting closed.

The Dean and Chapter having ordered that the cathedral should be thrown open to the members of the society, a large number proceeded thither and inspected the venerable structure and the works of restoration now proceeding.

Dinner had been provided at the Judges' Chambers for a hundred and twenty, but a much larger number applied for admission, and about fifty or sixty found no room. The very Rev. the Dean (Dr. Jenkyns) presided. Many ladies graced the table with their presence.

Evening Meeting.

The Very Rev. the Dean of Wells in the Chair.

After an appropriate address from the chair,

Mr. BAKER, after adverting to his paper read at the second quarterly meeting, on the *geology* of the county, proceeded to speak of the *fauna*. It was his wish to point out the connexion between the geology and the animals of the district, and he hoped to do so on a future occasion. He then gave a rapid sketch of the various classes from the *mammalia* downwards, interspersed with interesting anecdotes. His list of the fauna is given the second part.

Mr. W. STRADLING exhibited several curious articles of interest to the antiquary.

Archdeacon BRYMER said, within the last half-hour he had received some notes from Mr. Ferrey, on the magnificent parish church of St. Cuthbert's, in that city, and which was well worthy to be the daughter of the splendid cathedral. The notes were accompanied by two elaborate drawings of the very interesting discoveries made in St. Cuthbert's in 1848, consisting of an ancient fresco, and two altar-pieces of peculiar beauty. He then proceeded to read the notes, which gave a detailed description of the church, and were of great interest. He said, in conclusion, it was to him a subject of great satisfaction and gratitude that the Almighty had put it into the hearts of the worthy vicar and parishioners of St. Cuthbert's to attempt the restoration of their beautiful church. He sincerely trusted that they would be able fully to accomplish that good work, and that under God's blessing they would make that edifice one of the most beautiful and perfect specimens of Gothic architecture that exist throughout the length and breadth of the land.

Mr. C. E. GILES said he had that morning examined the sculptures in St. Cuthbert's church, and he felt that the same hands which executed them, produced also the beautiful specimens of the same kind which had been recently discovered in the church at Wellington. The latter were well worthy of being illustrated; and the committee proposed to give some drawings of them in their forthcoming volume.* He then stated that he had met with, a few days ago, in the church at Netherbury, Dorset, a remarkable series of figures in fresco. They seemed to be of the reign of Henry IV, and represented the various vices and virtues. Over several illustrations of charity were written the words,

* The Committee hope to enrich a future vol. with illustrations of the sculpture in St. Cuthbert's.

"For Jesu's sake." Unfortunately, they could not be preserved, and within a fortnight would probably be destroyed; but he had made tracings of them, which were then in the room, and he would endeavour to make a detailed communication respecting them at a future time.

The Rev. T. F. DYMOCK spoke on the subject of inscriptions found upon church bells. He read several, some of them very quaint and amusing.

At the suggestion of Mr. DICKINSON,

Mr. STRADLING then gave a description of the Peat Moor at Mere; after which

The Rev. F. B. PORTMAN proposed, and Mr. DICKINSON seconded, a vote of thanks to the Very Rev. Chairman for his kindness in taking the chair, and the ability and urbanity with which he had presided.

The motion having been carried by acclamation, the Dean briefly returned thanks, and the meeting closed.

Second Day.

The Bishop's palace and gardens having been courteously thrown open to the society, a numerous party availed themselves of the opportunity of inspecting the many objects of interest to the archaeologist and naturalist there congregated. They next proceeded to Glastonbury, where they were favored with most propitious weather for surveying the glorious ruins of the abbey, since become the property of Mr. Seymour, a member of the society.

The Rev. F. WARRE then read his paper on the abbey, which will be found in the second part.

After visiting the old barn, and ascending the Torr Hill, the geological structure of which formed the subject of a

short lecture, on the spot, by Mr. Moore, of Ilminster, the day was too far advanced for a visit to the Turf Moor, and the company broke up and proceeded to their respective homes, after two days of much gratification and enjoyment.

Many objects of interest were exhibited the first day, the principal of which are given in the subjoined list.

By the Society.—Brasses of Redcliff Church; ditto, Trumpington; two views of Nunney Castle; four of old Bridgwater; two of Lullington Church. Case of Peat. Hippopotamus Skin.

By Rev. E. C. K. Bearcroft.—Five Rubbings of Brasses.

By Dr. Markland.—Rubbings of Monumental Brasses executed by Messrs. John Hardman, and Co. 166, Great Charles-street, Birmingham, to the memory of—1. Rev. Walter Fletcher, Chancellor of the Diocese, in Carlisle Cathedral. 2. John B. Seymour, student of Balliol College, in the chapel. 3. Rev. Dr. Riddell, in the Roman Catholic Chapel, Newcastle on Tyne. 4. Rev. W. Richmond, in the Roman Catholic Chapel, Breewood. 5. W. Adair, Esq. of Heatherton Park, near Taunton. 6. Edward Parker, Esq. in Kensal Green Cemetery, London. 7. George Case, Esq. Prescot, Lancashire. 8. The Ven. Archdeacon Wrangham, in Chester Cathedral. 9. Joseph Leigh, Esq. Belmont, Cheshire. 10. John Ryland, Esq. Old Edgbaston Church, near Birmingham. 11. Mrs. Wrangham, wife of Mr. Serjeant Wrangham, Chester Cathedral. 12. Mrs. Clarke, Northfield Church, near Birmingham. 13. Henry Dawson, Esq. Lanside Abbey in Leicestershire.—Specimens of carving in wood, chiefly ornamental mouldings, by Giles Vinell, of Doulting.

By Mr. C. E. Giles.—Tracings of Frescoes from Netherbury Church; Drawings and Sketchings of Wellington Reredos. Curious plans of Ecclesiastical Buildings at Wells, by Carter, lent by Mr. Britton.

By Mr. Sheppard.—Manuscript Customs of the Manor of Wells. Mining Laws of Mendip, and Proclamation made by Lord Chief Justice Chock, on a stone at Priddy, called the Forge, in the reign of Edward IV. Ancient account of events in Wells, Copies of its Charters, &c. Ancient Iron Chest. Cases of Birds of Paradise, Golden Pheasants, &c. Fac-simile of the Warrant for beheading Charles I, 1648. Sword from King's Sedgmoor. Specimen of the Saw Fish. Skull of Porpoise.

By the Vicars Choral of Wells.—Two Ancient Manuscript Books.

By the Lord Bishop of Bath and Wells.—Two cases of Stuffed Birds.

By Mr. T. Serel.—Copy Glaston Abbey Seal, articles found in Glaston Abbey, old map of Westbury Park Manor. Collinson's History of Somerset. Many old manuscript documents relating to the local history of Somerset.

By Mr. W. Baker, Bridgwater.—A case containing Eight species of British Bats. A case of Trachiæ, Heads, Breast Bones, &c. of Birds. Five cases of Skeletons of Bats, Shrews, Reptiles, &c. Cases of Mustelae and Hoopoe.

By Mr. W. Tucker of Cannington.—A case containing Stoats, in winter and common dress, Vares, &c.

By Mr. Stradling of Chilton-super-Polden.—Antique Ornament for Priest's Robe. Ancient Extreme Unction Box. Dog's Collar of the reign of Queen Elizabeth. Case of British and Roman Antiques, principally from the Turbaries of Chilton-super-Polden and Edington. Ancient English Cross Bow and Jack. Finely diapered Battle Axe, found in a Rhine near Sedgmoor, date 1625.

By Mr. Paget.—MSS.—Pontificale Eccles. Ling., folio, 1397; Heare's Ref. 1470, quarto; Biblia Sacra, p. 1080, quarto; Biblia Sacra, A.D. 1300; Regulæ Ordinis, Benedic.

1593. Books—Caxton, Mirror of World, 1481; Wynkyn de Worde, Golden Legend, 1512; Biblia Sacra, 1476; Nov. Test. 1552; Byddel, Prymer, 1535; Barclay's Ship of Fools, 1570. Four Roman Dice. Engraving of Roman Sword. Unknown Implement. Coat of Chain Armour.

By Mr. Somerville.—Fruit, Tebilde and Dhoura Palm, N. Africa. Fossil Shells, from mountains above Thela in Egypt.

By Rev. D. M. Clerk.—Persepolitan Gems. Abbot Whiting's Toasting Fork and Flesh Hook. Broadsword and Belt found at Pilton. Thirty Brasses (various dates). Himalaya Pheasant.

By Rev. R. J. Meade.—Printed Sketch of Wellow Pavement, five pieces. Dendritic Schist. Papenheim. Florence Marble and Landscape Stone from Castleham; Bending Marble. Chinese Seal. Silicious Madrepore.

By the Lay Vicars.—MSS. Two Books, Charter of Elizabeth. Ancient Silver Drinking cups. Tankard, Saltcellars, Seal, Spoons.

By Mr. W. Tyndale.—Bit and Spur from Algiers. Fragment of Temple of Ephesus.

By Mr. Foster.—Dress of N. American Indian. Cromwell Bit.

By Dr. Boyd.—Porphyry. Verd Antique, Tessellated Pavement and Marble, from Carthage.

By Rev. A. B. Russell, Wells.—Indian Serpents, two vols. specimens of Indian Coins, Daggers, &c. Thirteen Engravings upon Copper.

By Rev. F. Warre.—Wooden Cup.

By Rev. H. Wickham.—Pedigree of Jones of Langford Court, date 1645.

By Mr. H. Powell, Wells.—Sixty Roman and English Coins. Fossils. Plesiosaurus, &c. Two Crucifixes,

(one dug up in Wells and the other in Wales.) One ancient Spur. Dagger dug up at Sedgmoor. Roman Pavement and Pottery. Specimen of Copper Ore. Jerusalem Thorn. Egyptian Isis. Specimen of Egyptian Cloth. Specimen of Cloth from Sandwich Isles. Alpine Flower found at the summit of the Alps. African Bird Killer. Old Sword.

By Mr. J. Walker, Jun., Axbridge.—Seventy-two Roman Coins found near Charterhouse, Mendip.

By Mr. H. P. Plowman, Wells.—Two cases, Casts of Seals.

Excursion.

IN pursuance of one of the objects of the society, that of visiting the most interesting spots throughout the county, a numerous party made an excursion in the month of June to Hamdon Hill, whose geological structure and ancient quarries were as attractive to the naturalist, as were its Roman remains to the archaeologist. They afterwards partook of the hospitality of W. Phelips, Esq. at Montacute House, well known as one of the best remaining specimens of Elizabethan domestic architecture. In the absence of Mr. Phelips, on the continent, the honours of the house were worthily done by his relative, Mr. Helyar, of Poundisford Lodge.

The motto over the gate-way, so characteristic of the "good old English gentleman," was not dishonoured on this occasion.

> "Through this wide opening gate,
> None come too early, none return too late."

Queries relating to the Churches of Somerset,

ADDRESSED to Residents in the County, disposed to furnish information on any of the subjects referred to, or to assist the Society in their investigations.

Date, *Name of Visitor,*

No.

Dedication.

Parish.

Archdeaconry.

Deanery.

I. Ground Plan.

1. Length } of Chancel { } Nave { } Aisles { }
2. Breadth }

Transepts { } Tower { } Chapels { }

3. Position by Compass

II. Interior.

I. Apse.

1. Roof, construction and mouldings.
2. Windows, their positions, forms, and varieties.
3. Floor and Steps, with their levels.

II. Chancel.

1. Roof, construction and mouldings.
2. Windows, their positions, forms, and varieties.
3. Floor and Steps, with their levels.

4. Altar.
5. Altar Rails.
6. Clerestory, positions and forms of windows.
7. Chancel Arch, its mouldings and forms.
8. Doorways and Doors.

III. North Transept.

1. Roof, construction and mouldings.
2. Windows, their positions, forms, and varieties.
3. Floor and Steps, with their levels.
4. Clerestory, positions and forms of windows.
5. Doorways and Doors.

IV. South Transept.

1. Roof, construction and mouldings.
2. Windows, their positions, forms, and varieties.
3. Floor and Steps, with their levels,
4. Clerestory, positions and forms of windows.
5. Doorways and Doors.

V. Lantern.

1. Position, form, and height.

VI. Nave.

1. Rood Screen
2. Rood Staircase.
3. Rood Door.
4. Rood Loft.
5. Clerestory, positions and forms of windows.
6. Piers, their positions, heights and forms.
7. Western Arch.
8. Roof, construction and mouldings.
9. Windows, position, form, and varieties.
10. Floor level, positions and height of Steps.
11. Doorways and Doors.

VII. North Aisle.

1. Roof, construction and mouldings.

2. Windows, their positions, forms, and varieties.
3. Floor level, positions and height of Steps.
4. Doorways and Doors.
5. Altar.

VIII. South Aisle.

1. Roof, construction and mouldings.
2. Windows, their positions, forms, and varieties.
3. Floor level, positions and height of Steps.
4. Doorways and Doors.
5. Altar.

IX. Font.

1. Position.
2. Description, form, and material.
3. Cover.
4. Kneeling Stones.

X. Ornaments, &c.

1. Pulpit and Lectern, of what material, and how ornamented.
2. Reredos.
3. Parclose.
4. Shrine (*fixed or moveable*).
5. Niches, carved figures, &c.
6. Brackets.
7. Mouldings.
8. Arcades.
9. Sepulchral Recesses, Effigies, &c.
10. Stoup.
11. Corbels, (*date of head-dress, &c.*).
12. Arches of construction.
13. Pavement (*material and design*).
14. Symbols of any kind.
15. Hagioscope.
16. Is there any low side-opening (Lychnoscope) in

the walls of the Chancel? If so, are there any traditions connected with this opening, or any name locally given to it?

17. Are there any stone slabs marked with Crosses in any part of the Church, either supposed Altar-stones, or otherwise?
18. Are there any Bench-ends having remarkable carvings or inscriptions on them?
19. Is there any ancient stained glass? If possible, send tracings on thin paper.
20. Are there any incised slabs or brasses? Send tracings or rubbings of them.
21. Chest for Alms *(Canon 8th)*.
22. Church Plate.
23. Church Chest.
24. Sun Dials.
25. Paintings on Walls or Roof.
26. Hour Glass.

III. Tower.

1. Form.
2. Number and height of Stages, and heights of Floors.
3. Parapet.
4. Pinnacles.
5. Windows.
6. Buttresses, number of stages.
7. Bells, number, date, and inscription.
8. Beacon or Belfrey Turret, situation and Form.
9. Weather-vane, description, form, and material.
10. Any peculiarities in material or construction of Tower stairs.
11. Doorways and Doors.

IV. Exterior.

1. West Window.

2. Parvise and Turret.
3. Buttresses.
4. Pinnacles.
5. Parapet.
6. Gurgoyles.
7. Gable crosses.
8. Mouldings.
9. Eave Troughs and general arrangements of Drains.
10. Crosses, Church-yard.
11. Sancte Bell Cot.
12. Lych-gate.
13. Coped Coffins, or Head Stones.
14. Rood Turret.
15. Hinges, Stanchions, and Iron work.
16. Roofs, present and ancient pitch, nature and form.
17. Masonry, rubble or squared, large or small stones, close or wide joints.
18. Nature of Stone.
19. Composition and age of Mortar.
20. Joints in Arches.
21. Note anything remarkable in the masonry, or otherwise, of the quoins or angles.

V. Crypt.

1. Any particulars.

VI. Miscellaneous.

1. Earliest Date of Registers, any entries of interest besides the names.
2. Any other Records, or ancient Documents, in the Church closet.
3. Any Library connected with Church, and any ancient Books or MSS. in it.
4. Funeral Atchievments, viz. Banners, Bannerets, Pennons, Tabard, Helm, Crest, Sword, Gauntlet, Spurs, Targe.

5. Needle Work, such as Altar-cloths, &c.
6. Images, of whom, and in what state.
7. Stone Sculptures, any remains of colour or gilding on them.
8. Heraldry.
9. Chapel *(particulars and position)*.
10. Brasses.
11. Monuments.
12. Epitaphs *(remarkable or ancient)*.
13. General state of repair.
14. Late Alterations—when—by whom—and in what taste.
15. On what day is the local feast, fair, or revel? Is it on the day of the dedication of the Church (old style) ?

N.B. The Committee will feel obliged by replies to the foregoing queries being entered neatly, and returned to either of the Secretaries, that they may be arranged in their respective Deaneries, in the Library of the Society. Replies to even a single query will be deemed of value. When the replies are too long for insertion, a separate sheet should be attached.

Application for advice may be made to the General Secretaries, or the Secretary for the District.

Queries relating to the Archaeology of Somersetshire,

ADDRESSED to Residents in the County, disposed to furnish information on any of the subjects referred to, or to assist the Society in their investigations.

Date, *Hundred,* *Parish,*

Name of Respondent,

I.

1. Are there in the Parish any Rocks or Stones which are objects either of tradition, or of popular superstition.
2. Are they naturally adherent to the soil, or placed there by the hand of man?
3. What are they called?
4. What is their Number?
5. Their Positions?

II.

1. Are there any Trees, Wells or Springs, which are of historical or legendary interest?

III.

1. Is there any ancient Road or Trackway in the Parish?
2. Its materials? Construction?
3. To and from what place does it lead?
4. Is it winding or in a straight line?

5. What name and history in the locality, is generally attached to it?
6. Its direction by compass?

IV.

1. Is there any spot historically known, or traditionally said, to be a Battle Field?
2. Have any remains supporting such tradition been found thereon, or in the immediate neighbourhood?

V.

1. Are there any Earthworks or Encampments?
2. Any Barrows, Tumuli, or rude Structures, designed for religious or sepulchral uses; such as Kist Vaens, or Cromlechs, &c.?
3. Have any of them been explored?
4. By whom? and when?
5. What was discovered in them?
6. In what position, with reference to compass, were the remains found?

VI.

1. Are there remains of any Edifices, which may be ascribed to the Romans?
2. Any Villas, Baths, Pavements, &c.?

VII.

1. Any similar works, which may be ascribed to the Saxons?
2. Danes or Normans?

VIII.

1. Have any ancient Seals, Weapons, Ornaments or other works of art been found?
2. Any Coins?
3. If Coins, mention the persons (Emperors, Kings, &c.) whose names they bear, the quantity found together at the same time, and any other articles found with them.

4. State the material of which they were composed: send impressions or representations of them.

IX.

1. Are there, or have there been any other Ecclesiastical Buildings in the Parish besides the existing Church, such as Oratories or private Chapels, &c.?

X.

1. What monastic or conventual establishments have there been in the Parish?
2. To what religious order did they belong?
3. What was the date of their foundation?
4. By whom were they endowed?
5. At what period were they dissolved or suppressed?
6. To whom were their possessions granted?
7. And by whom are they now held?
8. Have any Seals of such Monasteries been preserved?
9. If such Buildings remain, in what state of preservation are they?
10. What objects of interest are still preserved which formerly pertained to these Edifices?

State (if possible) the following particulars respecting these buildings:—

a. Situation of the Church with respect to other Buildings.
b. Situation and description of Cloisters.
c. " " of Chapter House.
d. " " of Abbot's or Prior's Lodgings.
e. " " of Gate-House.
f. " " of Hospital.
g. " " of other Buildings.

XI.

1. Are there any remains of domestic, civil, or military Edifices, either now occupied or in ruins?

2. Describe their origin, plan, history, present state, and architectural features.
3. Are there any Records of Buildings no longer existing?

XII.

1. Are there any ancient Bridges?
2. Describe their form and construction.

XIII.

1. Are there any remains of ancient Furniture, Costume, or Ornamental Work of any kind, particularly Heraldic, whether in Glass or other material?

XIV.

1. Are there any Crosses in the Parish (not in the Church-yard)?
2. Are they on their original site, and for what purpose were they probably erected?

XV.

1. Are there any Local Phrases or peculiar words in use in the neighbourhood?

XVI.

1. Are there any remarkable Local Airs or Melodies?

XVII.

1. Are there any remarkable Local Songs, Proverbs, or traditionary Tales current?

N.B. The Committee will feel obliged by replies to the foregoing queries being entered neatly, and returned to either of the Secretaries, that they may be arranged in their respective Hundreds, in the Library of the Society. Replies to even a single Query will be deemed of value. When the replies are too long for insertion, a separate sheet should be attached.

Application for advice may be made to the General Secretaries, or the Secretary for the District.

Form of Return relating to the Botany of Somersetshire.

No. in Bot : Soc : Catalogue.
Name.
Station.
Soil.
Habitat.
Aspect.
Time of Leafing.
Time of Flowering.
Observations.

NOTE.—In describing cryptogamic plants, "soil" and "aspect" will occasionally be omitted, and "fruiting" must be substituted for "flowering."

The Committee have received in reply to the above Queries much valuable information, for which they beg to tender their best thanks. Much however is still with-held which a very little zeal might suffice to supply. They trust the friends of the Society throughout the county will make the necessary effort for rendering the returns as complete as circumstances will allow.

Copies of the above Queries may be had on application to either of the General or Local Secretaries.

Uphill Old Church.

PAPER READ BY THE REV. F. WARRE, TO THE SOCIETY, ON THE HILL AT BURROWBRIDGE, SEPT. 27, 1849.

ON the extreme point of the Mendip Hills, where the river Axe, falling into the Bristol Channel, divides them from the promontory of Brean Down, stands—the very picture of desolation—the now deserted and ruinous church of Uphill, well known as a land-mark to ships bound up the channel. A more bleak and desolate spot can hardly be imagined. The village, of which till lately it was the parish church, is situated at the bottom of the hill; there is not a human habitation near it; and when the red sun sinks into the dark clouds which the stormy west wind hurries up from the Atlantic, and leaves the angry channel to dash its waves in darkness against the rocks of Brean, one no longer wonders at the querulous spirit which pervaded the writings of Gildas, who was once an inhabitant of this spot, or the unmeasured abuse which he heaps

upon the magnates of his unhappy country. And yet, desolate as it is, Uphill is not wanting in a stern beauty almost approaching to sublimity;—the repose of the wide extended plain on one side; the broad Severn sea on the other; the little town of Weston beneath, backed by the heights of Worle Hill, crowned with ancient and mysterious ramparts; the bold line of Mendip, along which stretches the Roman road, satisfactorily traced by Sir R. Hoare, from Uphill to old Sarum; the solitary majesty of the old church standing out so boldly against the sky: the rugged cliff and brown ridge of Brean, joined to the historic recollections attached to the place—all combine to render this desolate spot one peculiarly interesting to the antiquary, the artist, or the poet; while the caves beneath, filled as they are with relics of unknown antiquity, render it no less attractive to the geologist and comparative anatomist.

Uphill Church probably stands upon the site of the Roman Axium, the port from which the produce of their mining establishments at Wellow and elsewhere on the Mendip Hills was shipped,—mining speculation, and not mere glory, being probably the real motive of their invasion of this country; for that great nation, though not altogether advocates for the doctrines now held by Messrs. Cobden and Bright, were far too wise to engage in war without some more tangible object than mere fame.

As the antiquary ascends the path leading from the modern village to the church, the first vestige of the ancient town meets his eye in the shape of an escarpment on the naturally steep slope of the hill, now faintly marked, but evidently artificial, and without doubt intended to render the ascent more defensible—a precaution the necessity of which was fully proved in those ages when the coasts of this island were exposed to the inroads of the Danes, Uphill having more than once been destroyed by the piratical warriors of the North. The comparatively level summit of the hill is marked in all directions with the traces of ancient earth works, to the plan of which I have no clue whatever, though I think the termination of the Roman road may be perceived near the east fence of the churchyard; and on the south side of the hill, artificial escarpments are plainly to be seen, and, I think, an ancient landing place and wharf, by what I suppose to have been the Roman harbour; but being a stranger in the neighbourhood, and having no help beyond that of my own sight, having moreover the fear of Edie Ochiltree's "I mind the bigging o't" before my eyes, and fully impressed with Mr. Oldbuck's mortification when the sacrificial utensil with the inscription 𝔄 𝔇 𝔏 𝔏 turned out to be simply Aiken Drum's Lang Ladle, I will leave these relics of ancient nations to more learned and more daring antiquaries than myself, and will confine my observations to what actually exists of the curious old

Church, which is the only other object of antiquarian interest on the hill. The ruined tower, though well placed for a light-house to the port, and not improbably occupying the site of such a building, is, I believe, the remains of a windmill of, comparatively speaking, quite modern erection.

The church, which, though of small dimensions, still from the massive character of the building, and the peculiarity of its site, must strike even the most ignorant visitor as an impressive and solemn object, consists of a nave, central tower, and chancel, without either transepts or aisles, combining of portions of almost every style, from the earliest and rudest Norman, (if, indeed, Norman it be,) to quite late perpendicular. Indeed the church appears to have been re-built almost entirely at a very early period, and subsequently to have undergone restorations and repairs to a considerable extent, at various periods; still, however, vestiges remain of very ancient date, sufficient to render it probable that the whole of the foundation, and perhaps a considerable portion of the walls, are those of the original building, though the superstructure has been so often altered and modernized as to have materially changed the character of the greater part of the fabric, particularly of the central tower, which, nevertheless, is, at least in part of the south side, the same as stood between the nave and chancel shortly after the Norman conquest.

The chief entrance to the church is on the north

side, through a porch of considerable size, in proportion to the dimensions of the rest of the church, which from this cause, and from the peculiarity of its general appearance, is one of the chief features of the edifice, and appears to me to be worthy of particular attention.

Norman porches, though not very rare, are in this part of England by no means of common occurrence, and neither their appearance or structure is familiar to me. What therefore seems to me peculiar may not be so in reality; but I must take this opportunity of observing, that the object of this hurried sketch is not to give information upon a subject on which I am much fitter to be a pupil than a teacher, but to call the attention of antiquarians to an interesting relic of ancient days, which is rapidly falling into decay, and which in the course of a few short years will probably be entirely destroyed. The present appearance of this porch is particularly striking, the sides having given way outwards, and being supported by a sort of dwarf buttress, of very rude construction. Owing to this subsidence, the crown of the arch is much depressed, which is the cause of its present very uncommon shape. It has no shafts, or external moulding whatever, with the exception of a quarter round, receding slightly from the plane of the wall, which extends round the whole doorway, without any capital or interruption. Under this is a flat surface of nearly a foot, formed of squared stones. The

archivolt was probably plain and square; but from the opening having in after times been built up, with the exception of the small door-way, by which the porch is now entered, I cannot speak confidently on this point. The bases, if ever any existed, are either destroyed, or so buried as to be quite invisible. At the height of about six feet from the present level of the ground, a plain string course of very early Norman character, which forms a cornice to the interior of the porch, passing through the later masonry forms a sort of capital to the inner face of the door-jambs; and it is probable that before the giving way of the side walls the arch above was highly stilted, and terminated in a small segment of a large circle.

The vault is plain barrel, the construction of which, owing to the roof being gone, may clearly be seen. It seems to be composed of solid masonry, like that of a bridge, the great lateral pressure of which undoubtedly was the cause of the outward sinking of the side walls, and the consequent depression of the arch. In front of this the gable, forming the pitch of the roof, must have been raised, and the roof itself, which has now entirely disappeared, constructed above. The interior doorway is Norman, of the plainest and rudest character, the tympanum of the arch filled up to all appearance with one stone, and the door itself square headed. The whole porch, with the exception of the external quarter round, and the plain cornice

before mentioned, is destitute of all moulding and ornament whatever; on each side of the interior of the porch is a low seat of plain masonry. Altogether it is unlike any Norman work I have ever seen; but, as I observed before, it may be my ignorance, and not the construction of the porch, that is peculiar. On the north side of the nave, to the east of the porch, is one very small window, of apparently Norman character, but in so dilapidated a condition that it is not easy to make out whether the splay was wholly internal or not.

The west end is perfectly plain, with the exception of one very small lancet window, in the head of which is an indistinct appearance of foliation; but from the internal splay, which though built up may clearly be seen from the interior of the church, I should suppose that it cannot be of later date than the beginning of the reign of Edward the First, even if it be not of greater antiquity. This end, from the superiority of its masonry and better state of preservation, I conclude to have been built when the original edifice, having become ruinous, underwent very considerable repair, if not almost total rebuilding.

On the south side of the nave, having passed a modern square-headed window, we again come to remains of great antiquity. The masonry is here of the most rude and irregular description; and, more than half buried in the accumulated soil of centuries, stand the jambs and arch of a very rude

Norman door-way. This door-way is now built up; but the jambs, which appear to have been constructed of plain square ashler work, without shafts or ornament, with the exception of a very rude sort of capital, are very evident, and support one large flat stone, which fills up the tympanum of the arch. In the centre of this tympanum is a rudely described circle, containing a shallow carving of a cross of early character. On each side of this circle is a smaller one,—that on the east divided by radiating lines and probably intended for a dial; that on the west was either plain, or its contents have been obliterated by time. Round this tympanum is a very rude drip-stone, the peculiarity of which is that it does not form the segment of a circle, but is so placed that each stone meets the next at a very obtuse angle; but whether this was the original intention or, as seems more probable, the masonry has at some time been displaced by violence, I have no means of deciding. Beyond this, to the east, is a late perpendicular window with a semicircular head, but I see no reason to suppose that it is of earlier date than its mouldings and tracery indicate.

The interior of the nave presents but little worthy of observation, with the exception of the arrangement for combining the entrance to a stone pulpit, the supporting bracket of which only remains, with the staircase leading to the roodloft, which has also disappeared; and a tolerable font now placed in a niche at the west end.

The tower which stands between the nave and the chancel, is a massive and striking pile of building, at the north east angle of it is a three-sided staircase-turret, ending in an octagonal pinnacle, with a finial of late date, the base of the pinnacle being ornamented with a sort of parapet of the Tudor flower. To the west of this turret are three trefoiled windows, evidently insertions, the lowest of which is of two lights, but the mullion has disappeared. Above this window may be perceived the ashler work of a large rather sharp-pointed arch, but as to whether it was intended for a contemplated transept or merely an arch of construction, I will not risk an opinion. There is on this side of the tower a good pierced parapet of perpendicular character. The east and west sides of the tower are very plain, the parapet low and unpierced, with a good cornice moulding of late date. On each of these sides there is a small trefoiled window—that on the east of two lights, that on the west of one, the ashler work of both formed of very large stones and the workmanship very rude. On the south side, the tower is supported by two massive buttresses of four stages, which correspond with each other neither in height, thickness, nor mouldings; and in the upper part is a rude foliated window, formed of very large stones. At about four feet from the ground, on this side of the tower, we again meet with a vestige of very early work, in the shape of a very small round-

headed Norman window, now built up. On the stone which forms the arch of the window is a rudely carved dial, similar to that on the tympanum of the south door.

We now come to the chancel, the north side of which is evidently Norman, the roof supported by a corbel table composed of three rounds receding under one another, the effect of which is very good. It was lighted on this side by two small windows; that to the west is a plain round-headed Norman window; that farther to the east apparently corresponds with it; but on removing a piece of plaster which, as I supposed, filled up the arch, to my great surprise I found it was square-headed. I see no reason to doubt that it is of the same date as the other, though a square-headed Norman window is what I never before observed. The south side of the chancel has been re-built at a much later period, and has been mutilated by the insertion of a large square-headed window and a door for the admission of corpses, the chancel being still used for the funerals of those whose very natural wish it is, that their ashes may mingle with those of their fathers. There is, however, a priest's door, now blocked up, the mouldings of which are good and in good preservation. The east end is quite plain, the coigns formed of good ashler work; the other masonry very rough and bad. There is no east window, and from indications of foundations extending beyond the present east wall, I think it not improbable that it originally terminated in an apse.

To the interior of the chancel and tower I was not able to obtain access, though furnished with keys by the courtesy of the incumbent, the Rev. J. Fisher, the arch between the nave and chancel being filled up, and the lock of the chancel being so out of repair that no exertion of mine was sufficient to turn the key. Speaking, however, from memory, I should say that there is little or nothing in them worthy of attention, though on this occasion I much regretted being unable to examine the interior splay of the square-headed window, which I have mentioned as existing in the north wall of the chancel.*

I have thus attempted to give a sketch of what I believe to be a most interesting relic of ancient architecture. If I should be the means of drawing the attention of more competent antiquaries to these venerable walls, my object will have been gained. These walls now totter to their fall; the house in which so many generations have offered up prayers and praises to the Most High, is now only used for funerals. Another winter or two and the roof will be gone, and then the walls will soon crumble into dust, and the only link of connection between the ancient Uphill and the living world will be, that its weather-beaten tower will still serve as a land-mark for the navigation of the Bristol Channel.

* I have since ascertained that the internal splay has a semicircular head.

On Coins issued from Somersetshire Mints,

BY THE REV. T. F. DYMOCK.

THE money in common use in this country in former ages was not issued from one central mint as it is now, but was the production of many moneyers located in different parts of the island. In the times of the Saxon and early English kings there were several places in Somerset in which money was coined, and in each place one or more moneyers. It is intended in the present paper to point out these places, and to give as complete a list as possible of all the inscriptions which occur upon coins struck by royal authority within the borders of the county. Before we do this, it may be as well to state briefly the different kinds of money made use of by the different races which have occupied this island.

The British coinage in gold, silver and copper, was apparently formed upon a Grecian model, but that model not closely adhered to, as it furnishes

us with many obvious imitations of Roman types. Its circulation was probably in the southern parts of England chiefly, and lasted for a short period, being soon displaced by the coinage of the Romans.

The Roman money must have had a very extensive circulation amongst us for many ages from their first occupation of this country till some time after the arrival of the Saxons; for there is no evidence to show that the latter people brought money with them, or adopted the practice of striking it till some time after the settlement of the kingdoms of the Heptarchy.

The Saxon coinage appears to have been introduced gradually, at first in Northumbria in the seventh century; afterwards in Mercia, East Anglia, Kent and Wessex; and subsequently by the Sole-Monarchs in all parts of England; and here we find the first undoubted specimens of Somersetshire coins.

It is indeed probable that long before this, during the period in which Roman or British coins were the medium of traffic, many of them were struck within the borders of our county; but we cannot confidently point them out. We cannot say which of the many Roman coins, fresh from the die, which have been discovered in Burtle-turf-moor, or on the Mendip Hills, belong to this county or to any other: they bear no marks by which we can with certainty appropriate them; the initial letters in what is

called the *exergue* seem to indicate the place of mintage, but the interpretation of these initial letters has never been satisfactorily determined. Again, with respect to British coins, some of them may belong to Somersetshire, but we cannot say which; there are only a few which bear inscriptions, and Verulamium and Camulodunum are the only places which seem to be clearly indicated. Any appropriation of the majority of those pieces must rest upon very slender grounds. The late Mr. Skinner did indeed claim Camulodunum for this county; and if he did so upon just grounds, some of the best productions of British numismatic art would be ours; but as this claim has never been generally admitted, it would at least be premature to cite the numerous coins of Cunobeline as the undoubted productions of the West.

It has been stated that the earliest Saxon coins are probably of Northumbria; they are of small size and called *sceattæ*, resembling in form and type the French coins of the Merovingian race. The first *pennies* appear to have been struck in Mercia at the close of the eighth century; and this denomination of money (the silver penny) became the prevailing one both before and after the Conquest; nor were any pieces of larger size or value issued, with perhaps one exception,* till the reign of Edward III.

* The Groat of Edw. I. generally considered a pattern.

No place of mintage is indicated on the earliest pennies: the King's name and title, and the moneyer's name and designation, are all that they present to us. The first town inscribed is Canterbury, on the pennies of Baldred king of Kent, Ceolwulf king of Mercia, and Wulfred archbishop, in the beginning of the ninth century. In the following century, upon the coins of Alfred, appear for the first time the names of one or two places in the west, Winchester, Exeter and Gloucester; and a few years later, in the reign of his son and successor Edward the Elder, we have the earliest specimen yet discovered of a coin struck in this county: it is very rude and simple, having on one side the inscription EADVVEARD REX SAXONVM, in four lines, on the other, the word BAÐ, with two small crosses.*

Athelstane's power was more extensive than that of his predecessors. In addition to the title "Rex Saxonum" or "Rex Occidentalium Saxoniorum" used by them, he adopted that of "Rex Totius Britanniæ" contracted on his coins to "Rex To. Brit." Of these we have many specimens struck in most of the principal towns of England, from Exeter in the south west, to York in the north east; and amongst them three belonging to this county, one of Bath, and two of Langport (the only coins of the latter town which have yet been discovered): these have

* See plate 1, fig. 1.

likewise the moneyer's name and designation; we read on one BIORHTVLF MON BAT CIVITATI, on the other two BYRHTELM MO LANEPORT, and VVVNSILE MO LONEPORT.*

There are very few coins with the names of towns inscribed upon them during the reigns of Edmund, Edred and Edwy; we have not been able to discover a single Somersetshire specimen. In the time of Edgar, Bath appears again†, and Ilchester for the first time; upon both of these coins the King's title is "Rex Anglorum:" we know that this title had been adopted before by his predecessors as early as the reign of Edward the Elder,‡ but it does not appear till now upon any *coin*. We are told that Edgar in the year 973 was consecrated with great ceremony at Bath, and shortly after went up the Dee to Chester, where he was met by eight of the petty kings of Scotland, Britain, and Wales, who came to do him homage, and rowed his vessel up the river while he sat at the helm; and that upon that occasion he said that henceforward his successors might boast that they were indeed kings of the Angli. Without supposing these coins to be commemorative either of the coronation, or the triumphal approach to Chester, it is probable that they were subsequent to those events, and that the title "Rex Anglorum," which had been used before,

* See fig. 2, the Bath coin is engraved in Ruding. Plate XVIII, No. 24.

† See fig. 3. ‡ See Cod. Dipl. Œvi. Sax.

had by this time become established. It is the one always made use of upon the coins of Edgar's successors.

Of Edward the Martyr we do not know of more than one Somersetshire specimen, struck at Bath*; but from Ethelred II to Harold II they occur in considerable numbers, bearing the names of what were then the principal towns of the county, Bath, Ilchester, Taunton, Watchet, Crewkerne, Bruton, and Cadbury; of these by far the greatest number were issued from the mints of Bath and Ilchester. Langport has already been mentioned as presenting two pieces in the reign of Athelstane; and there is a coin of Ethelred II with the inscription MYLE, which has been given to Milborne Port. The types which are known of these nine places of mintage before the Conquest, do not amount altogether to more than twenty-five; and the inscriptions, including some minute variations, are about 125. This is the result of a careful examination of the Anglo-Saxon coins in the British Museum, and several other important English collections, as well as of those which are preserved in such great numbers in the Royal Cabinet of Stockholm, and which have been recently described in so complete a manner by M. Hildebrand.† Some idea of the richness of this

*See fig. 4.

† The author does not mean to say that he has seen the Stockholm collection, but that they have evidently been carefully examined by M. Hildebrand. The reader will observe how much the Somersetshire list has been augmented from his work.

collection of Anglo-Saxon money at one particular period, during the reigns of those monarchs who were of Danish origin, and of those upon whom the Danegeld was levied, is conveyed in the comparative statement made by M. Hildebrand of the number of coins of Ethelred II, Canute, and Harold I, in the British Museum and in the cabinet of the King of Sweden. Of Ethelred II, (according to M. Hildebrand) the British Museum has 144 pieces, the cabinet of the King of Sweden 2254; of Canute, the British Museum has 380, the cabinet of the King of Sweden 1396; of Harold I, the British Museum 48, the cabinet of the King of Sweden 237. The relative numbers are very different in the time of the Confessor: of this king the British Museum contains 450 specimens, the Swedish cabinet 273.

This statement may serve as an illustration of the extent to which our forefathers were plundered in the 10th and 11th centuries.

We cannot discover that coins were struck in this county after the conquest at any other towns than Bath, Ilchester, and Taunton. There is indeed a charter of the Empress Maud, quoted by Hearne, in which allusion is made to a mint at Glastonbury, granted with other privileges to Henry, prelate of the church there;* but the name of Glastonbury on any coin yet remains to be discovered. Bath and Taunton are mentioned as places of mintage in

* See Ruding's Annals of the Coinage.

Domesday; the moneyers at Bath paid an annual rent of 100s for the use of the mint in that city in the time of William I, and the moneyers at Taunton 50s. This may perhaps give some idea of the relative importance of those places at that time.

In 1097, William Rufus gave to God and the church of St. Peter of Bath, and to John the Bishop, and to his successors, all the city of Bath, for the augmentation of the revenue of the see, for the good of the soul of his father King William I, and the souls of his mother, of himself, and of his ancestors and successors, *together with the mint*, &c.* and this grant was confirmed in 1100. We have coins of William I or II and Henry I, from the mint at Bath, but nothing of a later date.

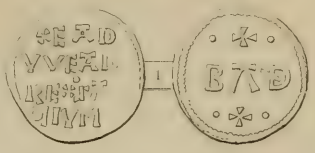
Specimens from the mint at Taunton of the time of Stephen are extant, but we have no evidence of its having been worked afterwards. Coins were struck at Ilchester in the reigns of Henry II and Henry III: in the 33rd year of Henry III a writ issued for the choice of officers in this mint. These appear to have been the last coins struck in this county by royal authority; it was probably found sufficient to give the privilege of coinage to the larger towns, and this part of England was supplied from the mints of Bristol and Exeter. The Exeter mint was disused after the reign of Edward I, but from the mint at Bristol issued both

* See Rud. vol. ii. 210.

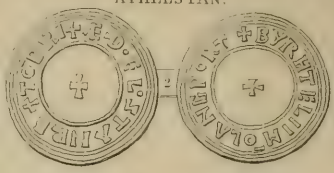
gold and silver coins, nobles, angels, and groats, during the reigns of our Edwards and Henrys, till the time of Queen Mary, when the custom of coining in country mints ceased. During the troubles of the civil war it was found convenient to revive the practice, and accordingly among the pieces of necessity of that time we have some which were struck at Exeter and Bristol from 1642 to 1645, when those places held out for the king, but no such pieces are known to have issued from any town in this county.

We now proceed to give the list of inscriptions, illustrated by two plates. All the engravings in them are from Somersetshire coins. Where it was not possible to obtain a drawing of a Somersetshire specimen, it has been thought sufficient to refer to the plates in Ruding's Annals of the Coinage, where the type appears exemplified by a coin of some other county.

EDWARD THE ELDER.

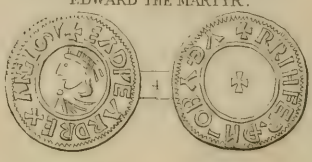


ATHELSTAN.



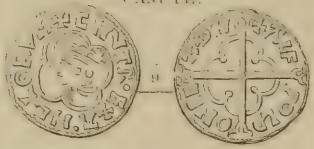
EDGAR.

EDWARD THE MARTYR.



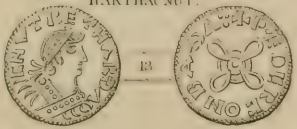
ETHELRED II.

CANUTE.

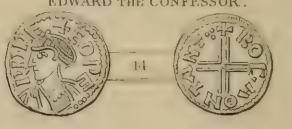


HAROLD I.

HARTHACNUT.



EDWARD THE CONFESSOR.



COINS FROM SOMERSETSHIRE MINTS.

LIST OF COINS ISSUED FROM SOMERSETSHIRE MINTS.

	Inscription.	Town.	Type.	Collection.
EDWARD ELDER	BAÐ	*Bath*	Fig. i.	B. M.
ATHELSTAN	BIORHTVLF MON BAT CIVITATI	„	Fig. ii.	„
	BYRHTELM M⁻O LANLPORT	*Langport*	„	CUFF
	VVVNXILE — LONLPORT	„	„	B. M.
EDGAR	ÆÐELXILE MO BAÐA CIVI	*Bath*	Fig. iii.	„
	ÆÐELFERÐ — CIFLE	*Ilchester*	Fig. iv.	HILD.
EDWARD MARTYR	BRINFERÐ — BAÐA	*Bath*	„	CUFF
ETHELRED ii.	ÆÐEXAN ON BAÐ	„	„	HILD.
	ÆÐEXTAN — ——	„	„	„
	ALFƿOLD — ——	„	„	„
	——— — BAÐA	„	„	„
	COD — CADANBYRIM	*Cadbury*	„	„
	CODEFRVD — CADEN	„	„	„
	LEOFXILE M⁻O CIFEL	*Ilchester*	„	„
	EADRIC ON TANTVNEM	*Taunton*	„	„

	Inscription.			Town.	Type.	Collection.
ETHELRED ii.	ÆÐELSILE	M⁻O	BAÐ	*Bath*	Fig. v.	T. M.
(*continued*)	ÆLFSILE	—	LIFLE	*Ilchester*	„	HILD.
LOD	—	LIFLECES	„	„	„
SILERIC	—	PECED	*Watchet*	„	„
ÆÐELRIC	—	BAÐAN	*Bath*	Fig. vi.	T. M.
ÆLFELM	—	LIFELC	*Ilchester*	„	HILD.
LOD	—	———	„	„	„
PVLFELM	—	LIFEL	„	„	„
SILERIC	—	PECED	*Watchet*	„	T. M.
ÆÐELRIC	—	BAÐ and BAÐA	*Bath*	Fig. vii.	HILD.
EDSTAN	—	——	„	„	„
HILDSILE	—	——	„	„	„
PVNSTAN	—	——	„	„	„
PYNSTAN	—	——	„	„	„
ÆDELRIC	—	LIFEL	*Ilchester*	„	„
LOD	—	LIFELC	„	„	„
——	—	———S	„	„	„
——	—	———ES	„	„	„
LEOFRIC	—	LIEL	„	„	„
——	—	LIFEL	„	„	„

LEOFSILE	—	LIFE	„	„	„
PVLFELM	—	——	„	„	„
——	—	LIEEL	„	„	„
SILERIC	—	PECED	*Watchet*	„	DYMOCK
ÆLFRIC	M°O	BAÐ	*Bath*	Fig. viii.	HILD.
ÆÐELRIC	—	——	„	„	„
EDSTAN	—	——	„	„	„
——	M°O	——	„	„	„
EDSTN	M°O	——	„	„	B. M.
HILDESILE	OM	——	„	„	HILD.
HILDSILE	M°O	——	„	„	„
PYNSTAN	—	——	„	„	„
——	M'O	——	„	„	„
VINAS	—	CRVCERN	*Crewkerne*	„	„
LOD	M°O	LIFELC	*Ilchester*	„	B. M.
LEOFNV	M'O	LIFNC	„	„	HILD.
LEOFSILE	—	LIFEL	„	„	„
ÆÐ * *	*	MYLE	*Milborne?*	„	„
LEOFPINE	M.O	TANT	*Taunton*	„	„
HVNEPINE	M'O	PECED	*Watchet*	„	„
ÆLFRIC	M°O	BAÐ	*Bath*	Rud. fig. i.	„

		Inscription.		Town.	Type.	Collection.
Ethelred ii.	ÆÐELRIC	M°O	BAÐ	*Bath*	Rud. fig. i.	HILD.
(*continued.*)	ÆÐEXTAN	—	——	,,	,,	,,
	ALFÞOLD	—	——	,,	,,	,,
	LEOFPINE	M.O	BAÐI	,,	,,	,,
	ÞINAX	M°O	LIFELC	*Ilchester*	,,	,,
Canute.	ÆLFRIC	ON	BAÐAN	*Bath*	Fig. ix.	B. M.
	——	—	BEAÐN	,,	,,	,,
	ÆÐELRIC	—	BAÐA	,,	,,	,,
	ÆÐEXTAN	—	BAÐ	,,	,,	,,
	ALFÞALD	—	——	,,	,,	,,
	ALFÞOLD	—	BEAÐN	,,	,,	,,
	ÆLFELM	—	BRIV	*Bruton*	,,	,,
	ÆLFÞINE	—	——	,,	,,	HILD.
	ÆLFEL	—	CAD	*Cadbury*	,,	B. M.
	ÞINAX	O	CRVCY	*Crewkerne*	,,	HILD.
	——	ON	CRVC	,,	,,	,,
	ÆLFXILE	—	LIF	*Ilchester*	,,	,,
	——	—	LIFEL	,,	,,	,,
	ÆLFPINE	—	LIEL	,,	,,	,,
	——	O	LIFEL	,,	,,	,,

———	ON	LIFL	,,	,,	,,
ÆÐELPI	—	LIF	,,	,,	,,
ÆÐLMÆR	—	LIFL	,,	,,	,,
LOD	—	LIFELCST	,,	,,	,,
—	—	LIFLCES	,,	,,	,,
LODPINE	—	LIFL	,,	,,	,,
LEOFPINE	—	LIF	,,	,,	,,
OSPI	O	LIFELC	,,	,,	B. M.
—	ON	LIFLE	,,	,,	HILD.
OSPIE	—	LIFE	,,	,,	,,
PVLFELM	O	LIF	,,	,,	,,
———	ON	LIFL	,,	,,	,,
ÆLFXIL	—	TANTV	*Taunton*	,,	,,
EDRIL	—	TANT	,,	,,	,,
——	O	TANTV	,,	,,	,,
EDPNC	—	TANTV	,,	,,	,,
LODCIL	—	PECE	*Watchet*	,,	MARTIN
ÆLFRIC	ON	BAÐ	*Bath*	Fig. x.	HILD.
ÆÐLXTAN	—	BAÐA	,,	,,	HUNTER
ÆXTAN	—	BAÐANN	,,	,,	HILD.

	Inscription.			Town.	Type.	Collection.
CANUTE	ALFƿOLD	ON	BAÐ	*Bath*	Fig. x.	HILD.
(*continued*)	LEFOꞒ.LE	—	BAÐA	„	„	„
	ÆLFFELM	—	BRIVT	*Bruton*	„	„
	ÆFLƿINE	—	EIFE (E for L)	*Ilchester*	„	„
	LEOFƿINE	—	BRV	*Bruton*	Rud. fig. iv.	HUNTER
	ÆLELƿIL	—	LIFEL	*Ilchester*	„	HILD.
	LÆFEL	—	LIFE	„	„	„
	ÆLELMÆR	ONN	BAÐA	*Bath*	Rud. fig. xxiii.	„
HAROLD i.	ÆLFƿIL	ON	BAÐA	„	Fig. xi.	„
	ƿEDEL	—	BAÐAN	„	„	CUFF
	BRIHTRIL	—	LRV	*Crewkerne*	„	HILD.
	ƿÆDELL	—	BAÐ	*Bath*	Rud. fig. iv.	„
	LEOFƿINE	—	BEO	*Bruton*?	„	„
	———	—	BRÆ	„	„	„
	ÆLMÆR	—	BAÐA	*Bath*	Fig. xii.	HILD.
HARDICANUTE	ƿÆÐERL	—	——	„	Fig. xiii.	PENROSE
	ƿÆDEL	ONN	——	„	Fig. xiii. but head to right	HILD.
EDW. CONFESSOR	ÆLFƿINE	ON	BRV	*Bruton*	Rud. fig. xxxi.	HUNTER
	ÆLLƿINE	—	LIFEL	*Ilchester*	„	DURRANT

	ÆLELMÆR	—	BA	*Bath*	Fig. xiv.	HILD.
	ESTMVI	BAÐE		„	„	CUFF
	LEOFPIN	ON	LI	*Ilchester*	„	„
	BOLA	—	TANT	*Taunton*	„	„
	ÆLELMAER	—	BAÐ	*Bath*	Fig. xv.	HUNTER
	PVLFPERND	—	LIFE	*Ilchester*	„	HILD.
	BOIA	—	TANTVNE	*Taunton*	„	B. M.
	DVRBERD	—	LIFE	*Ilchester*	Rud. fig. xiv.	HILD.
	BRIHTRIC	—	TANTVNE	*Taunton*	Fig. xvi.	B. M.
	ÆLFPINE	—	LIFE	*Ilchester*	Rud. fig. xxvi.	HUNTER
HAROLD ii.	BRIHTRIC	—	TAN	*Taunton*	Fig. xvii.	DYMOCK
	ÆLLPINE	—	LIFL	*Ilchester*	Rud. fig. ii.	BRUMELL

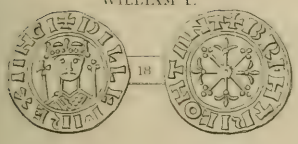
AFTER THE CONQUEST.

WILLIAM i.	PÆLELPINE	ON	GIF	*Ilchester*	Fig. xviii.	B. M.
	BRIHTRIC	—	TANT	*Taunton*	„	„
WILLIAM i. or ii.	IEGELPINE	—	GIFI	*Ilchester*	Fig. xix.	„
	IEGLPINE	—	GIFLI	„	„	CUFF
	IEGLPNE	—	GIFELC	„	„	B. M.

	Inscription.			Town.	Type.	Collection.
William i. or ii. (*continued.*)	IELFƿINE	ON	TANV	*Taunton*	Fig. xix.	B. M. AND BLUETT.
	EHLFƿARD	—	GIFE	*Ilchester*	Fig. xx.	CUFF
	IELƿORD	—	GIFL	„	„	DYMOCK
	ƿICHXSLI	—	GIFLI	„	„	SHEPHERD
	———	—	GFLDS	„	„	B. M.
	IELFƿINE	—	TANV	*Taunton*	„	„
	———	—	TAN	„	Fig. xxi.	„
	IEGLMIE	—	BAÐN	*Bath*	Fig. xxii.	„
	OSMIER	—	———	„	„	„
	———	—	BAÐNI	„	„	„
	IELƿORD	—	GIFL	*Ilchester*	„	„
	IELƿƿORD	—	GIFLI	„	„	„
	IELFƿINE	—	TAN	*Taunton*	„	„
Henry i.	ƿINTERLEDE	—	BAÐA	*Bath*	Fig. xxiii.	„
	OSBERN	—	BAD :	„	Fig. xxiv.	RASHLEIGH
Stephen	ALFRED	—	TAN	*Taunton*	Fig. xxv.	„
	* ED	—	TANT	„	„	„
	* * *	*	TANTV	„	„	„

HAROLD II.

WILLIAM I.



WILLIAM I. or II.

HENRY I.

STEPHEN.

HENRY II.

HENRY III.

COINS FROM SOMERSETSHIRE MINTS.

	SAPINE	—	TANT	„	„	B. M.
HENRY ii.	R * *	*	IVE-CE	*Ilchester*	Fig. xxvi.	„
	ROC *	ON	IVE-C	„	„	„
	* *	—	IVEL	„	„	„
	ADAM	—	——	„	„	„
HENRY iii.	HVGE	—	IVELCE	„	Fig. xxvii.	SAINTHILL
	RANDVLF (or PH)	ON	IVE	„	„	T. M.
	STEPHE	ON	IVEL	„	„	SAINTHILL
	STEFNE	—	——	„	„	„
	TERVEI	—	IVE	„	„	„

The Coins in the foregoing list with the letters HILD. are in the cabinet of the King of Sweden; those with B. M. in the British Museum; those with HUNTER in the Glasgow Museum; those with T. M. in the Taunton Museum, and those marked SAINTHILL and PENROSE, are given upon the authority of R. Sainthill, Esq. The rest are in private cabinets, the owners of which have kindly favored me with impressions or inscriptions of their coins. Fig. 24, in the second plate, has by mistake been drawn more perfect than the original really is.

T. F. D.

Sculptures in Church of St. John Baptist, Wellington, Somerset.

BY MR. C. E. GILES.

IN the spring of the year 1848, while the decayed chancel of the church of St. John Baptist, Wellington, was being pulled down, some beautiful sculptures were found in detached pieces, turned upside down, and forming the floor of the space around the altar. Further examination shewed that the faces of the figures, and all the characteristic features, had been destroyed by the hammer, while the rich colouring and gilding were nearly perfect, owing, perhaps, to a coat of plaster which had been spread over their surface, to receive the decalogue in black letter with red capitals. Evidently these sculptures formed a portion of a very elaborate reredos, which the iconoclastic spirit of the Reformation had not spared, and probably in after times the final blow had been dealt, when they were thrown down to form a part of the pavement. Exposure to the air and other causes destroyed the colours, so that now little of their original splendour can be traced. Having, however, made correct sketches at an early period, and marked

each colour, I am enabled to vouch for the accuracy of the specimen given in the accompanying plate. What the design of this reredos was seems very uncertain; the principal fragments found form portions of a regular series of panels, about twenty inches high. In the centre was the crucifixion, and "on each side were trefoiled niches, so disposed as that a larger figure, averaging seventeen inches high, in a niche the whole height of the relief, alternated with pairs of smaller figures, one above the other, each about eight and a half inches high, ranged in smaller compartments, two of which are comprised in the height of the sculptures". I have been unable to form any satisfactory idea of the original arrangement of this screen: there were evidently larger figures, probably half the size of life, for portions of very rich canopies remain of this size, one of which appears to have been the centre of the arrangement. The panel, containing St. Christopher, would seem to have commenced the series of smaller figures; the crucifixion occupies the centre, and I believe the St. Michael, with the shrouded figure, was the last.

"The crucifixion represents our Lord (in the most conventional way) extended on a T cross. The compartment is foliated under a square head: the ground is blue, thickly pounced with fleurs-de-lys in gold, but at the lower part a green colour has been added over the blue, as if to represent a background of country," probably, from its being in the

form of a hill, Mount Calvary. "The fleurs-de-lys can also be seen under the superadded green, but have not been gilt. The cross itself is of gold, with a floriated border of red and black along every edge. The figure of our Saviour has the hair of gold, and the drapery also of gold, with red and black lines on the folds. It would seem that there were originally two small figures of angels, one at each extremity of the arms of the cross. Near the cross stand two soldiers, much mutilated. At the dexter side are two more figures, apparently the Blessed Virgin supported by another female. The one which seems to be the Virgin is remarkably draped: the dress is of gold, with a cross-pattée on the breast in black, and black edgings, with blue sleeves and a blue mantle: the hair is golden. The other figure has a tunic of dark red, bordered in gold, and a mantle of gold lined with blue, and turned up and hemmed in red. Two other figures, on the sinister side, seem to be a soldier and a figure in a cope: but in most unintelligible attitudes.

"One considerable fragment contains four large and six small figures in niches. The first, on the dexter side, appears to be a female, gorgeously habited and holding a handkerchief. The tunic is blue, powdered with gold and red spots, and hemmed in gold: the mantle, gold lined with vermilion and bordered with green, embroidered with a flowing pattern of vermilion and gold. The second figure is a bishop, with mitre, staff, and chasuble, and

NATURAL HISTORY.

giving the benediction. The third appears to be holding his own head after decapitation; and would be St. Denys, were it represented as a bishop. Fig. 4—a large one—is elaborately coloured and habited, and carries a staff, scrip and bottle; but no cockle-shell—indeed, no head-dress at all—which should make it St. James. No. 5, seemingly in crown and cope, is too much mutilated for explanation. No. 6, is an abbess with staff and book. No. 7, has a cope and spear, and may represent St. Philip. No. 8, is an archbishop; over, No. 9, another abbess: and No. 10 is St. Peter, arrayed with great magnificence.

"Another piece (represented in the accompanying drawing,) contains seven figures, three large and four small. The first is a large one, and is habited in a cope, much mutilated, remarkable for a thick cord passing round the neck and depending in front. Figure 2, is perhaps St. John at the Latin Gate, being a figure half immersed in a vessel or barrel. Below it is St. Catharine, and an angel destroying the wheel. Figure 4, a large female figure carrying a sword, may probably also represent St. Catharine. No. 5, is a six-winged cherubim, carrying (it would seem) a soul in a linen cradle:—by no means an uncommon representation. The niche below it is vacant; two holes remain, by which a figure would seem to have been pinned in. The 7th figure is a bishop in the attitude of benediction.

"A fourth fragment contains but one large figure, probably St. Mary Magdalene, and two small ones, one a bishop, both carrying labels.

"A fifth sculpture contains a large St. Christopher, and two smaller niches, of which one has a ship—of yellow, with a white sail charged with crosses in vermilion, the crew yellow, and sea blue," in which are represented small fishes; "and the other a most singular representation of a mermaid, with glass and comb!

"Another large piece contains two large and four smaller figures, which cannot be assigned to particular saints; and a seventh fragment displays St. Michael, with the dragon and scales, and in two smaller niches a shrouded figure (such as is occasionally seen in brasses) and a naked figure walking over a toothed instrument.

"An eighth fragment, containing two large and four small figures, is much mutilated. One large figure holds the hull of a ship; the other, a male, appears to have a long club. Of the smaller ones, two seem to be deacons in dalmatics, and one holds a fringed label.

"The ninth piece has a large figure complete, and the half of a second, divided by two small figures in copes.

"And now as to the date of these interesting remains. The character of the foliation of the stonework would point to about the year 1400, early in the third-pointed period. This date is confirmed

by the armour in which the soldiers are dressed in the panel of the crucifixion. They are seen,—in spite of the dreadful mutilation they have suffered, —to have a camail round the neck, a tight-fitting jupon emblazoned; a horizontal studded baldric, or sword-belt, and pointed sollerets on the feet. The year 1400 will be a date, rather late perhaps than otherwise, for that point in the transition from mail to plate armour, which is indicated by these particulars. It is curious to observe that the jupon of one of the figures is emblazoned with scorpions: a device represented by ancient artists occasionally on the surcoats of the quaternion of soldiers who were present at the crucifixion,—since revived for the same purpose by Overbeck.

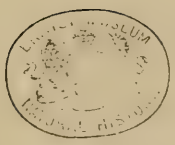
"The above date is also confirmed by the costume of some of the female figures. The large Saint Catharine, for example, has a close-fitting surcoat, or bodiced gown, with an outer mantle fastened by a jewelled strap or band across the breast. [See drawing.] There is no wimple, however, nor head-dress, the neck being bare and the hair long and flowing. This dress is well known as belonging to the close of the 14th century—the reign of Richard II and Henry IV.

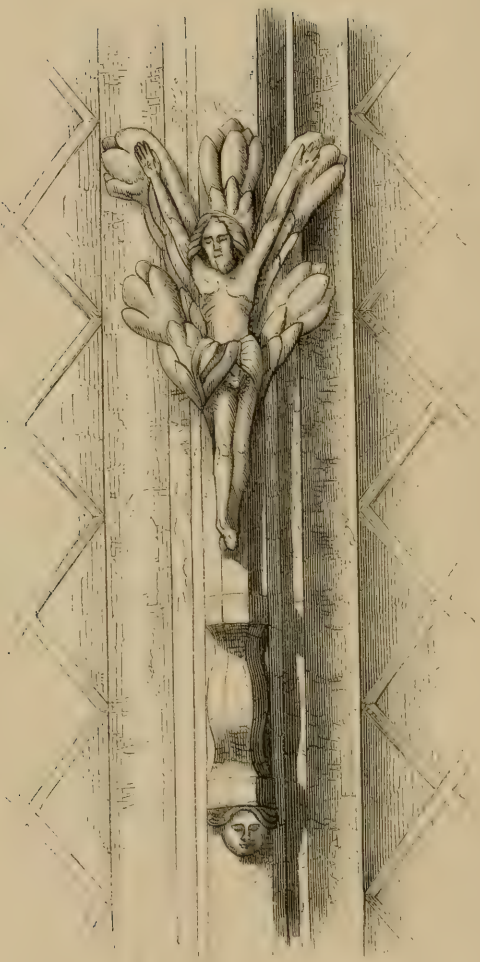
"The true date, therefore, may be fairly concluded to be a little earlier than the year 1400. It may further be observed, that no figure in the series has a nimbus; and that the tracery of the niches, as well as the figures, was all beautifully diapered and coloured.

"The general date of the chancel of Wellington church being of the transition from first to middle-pointed, this reredos must have been a later addition."

The foregoing quoted passages are taken from an account given in the Ecclesiologist for August, 1848, from sketches and memoranda which I furnished. As they afford information additional to that supplied by myself, I have extracted them to accompany the illustration of one of the fragments now given to the public for the first time. The portion containing the figure of St. Catharine has been selected as affording an example of costume very characteristic, and clearly marking the date of these sculptures. Few can fail to admire the exquisite grace and symmetry of this representation of one of the most favorite saints of the middle ages. The gown open at the sides, and displaying the dress beneath, is stated by Fairholt, in his useful work on "Costume in England," to be first observable in monuments of the time of Edward III, and to have continued in fashion until the reign of Henry VI, a period of about a century, a sufficient proof of the estimation in which this elegant costume was held. In the notice previously quoted, it is stated that there is no head-dress; this is hardly correct; the peculiar horns which made the ladies' head-dress of this period notorious, are very clearly distinguishable.

On the centre mullion of the east window of a chantry chapel adjoining the south aisle of this



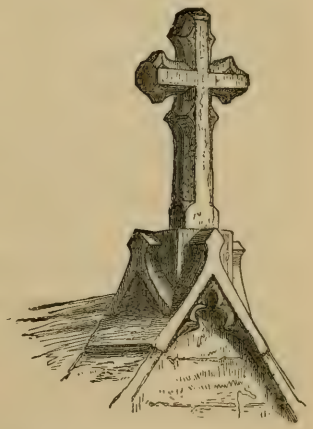


SCULPTURE ON CENTRE MULLION OF WINDOW

AT EAST END OF SOUTH AISLE OF WELLINGTON CHURCH, SOMERSET.

church, is carved the singular crucifix represented in the accompanying plate: the cross is budding into lilies, symbolical of the life in death, and the purity imparted through the same: the buds are five, representing the five wounds. The exact meaning of the lower symbols I am unable to explain; but, perhaps the grotesque head, crushed by the pedestal, may signify the victory over sin.

I may add that the chancel inclined considerably to the south, and that the east window (happily preserved) is a very valuable example of transition work, probably late in Edward I.



On the east gable of the nave stands the cross represented in the margin; it is an unusual and bold type, perhaps earlier than the fifteenth century work below it. Some traces of a former church of Norman date, were discovered embedded in the walls, with polychromatic decorations, including also a cushion shaped capital, with square abacus.

On one of the bells is the inscription,

"Nos resonare jubent pietas mors atque voluptas."

Ancient Earth-work at Norton Fitz-warren.

BY THE REV. F. WARRE.

THE summit of the hill on the north of the parish church of Norton Fitz-Warren, situated about two miles and a half north-west of the town of Taunton, is occupied by a very curious and remarkable earth-work; which, strange to say, seems to have escaped the notice both of Collinson and Phelps: nor have I met with any mention of it, except in a paper upon the Roman remains discovered at the neighbouring farm of Conquest, in the year 1666, by an anonymous writer (who certainly appears, from the mistakes he has made, not to have been well acquainted with the country), which is to be found among the miscellaneous tracts appended to Hearne's chronicle of Robert of Gloucester and Peter Langtoft, published in four volumes at Oxford in the year 1724. This omission is the more extraordinary, as the earth-work is situated in the midst of ancient enclosures, in a part of the country where the plough has long ago destroyed every other vestige of similar works; indeed it is probable that this has only escaped, from the fact of the area con-

tained within the ramparts being of a convenient size for agricultural purposes; and the ramparts themselves consequently useful as fences, of a very different kind from that for which they were originally constructed.

A foot-path from the church to the rectory leads us up a rather steep ascent to the south-west side of the camp or town, which it enters by a wicket-gate, and passing on to the north-west side, leaves it by a similar gate; the rampart being broken through at both points, another path, branching off immediately within the entrenchment, leads to the north-eastern boundary, which it passes through by a gate now used for farming purposes. Whether these entrances existed in the original plan of the work or not, I have no means of discovering, but it seems more probable that they have been made in, comparatively speaking, modern times, for the convenience of the tenant and the neighbourhood in general. Besides these doubtful gates, four others are very evident. As to those on the north, west, and south sides, there can be no doubt; the deep excavations which formed the avenues to them being still in existence, though now occupied by trees and brush wood; while that leading to the eastern entrance, though nearly obliterated by the plough, may still be traced through the fields in the direction of Staplegrove. The western gate appears to have had two entrances, the space between which was probably occupied by a fortification for the defence of what was evidently

the principal entrance to the place. The rampart consists of a deep ditch of irregular breadth, with an external and internal vallum, and is still perfect in the greater part of its extent; though the outer vallum has been destroyed in some parts, and the whole rampart from the western gate to the wicket leading to the rectory, is nearly obliterated. The area contained within the ramparts is about thirteen acres, and has so long been under cultivation, that all traces of its original contents have disappeared, with the exception of hollows leading from the four gates towards the centre of the area; which is more particularly remarkable at the eastern entrance, where it is sufficient to act as a drain for the surface water of the enclosure; the accompanying plan, for which I am indebted to the kindness of an ingenious friend, will render the description which I have given more intelligible than I can hope to make it in words.

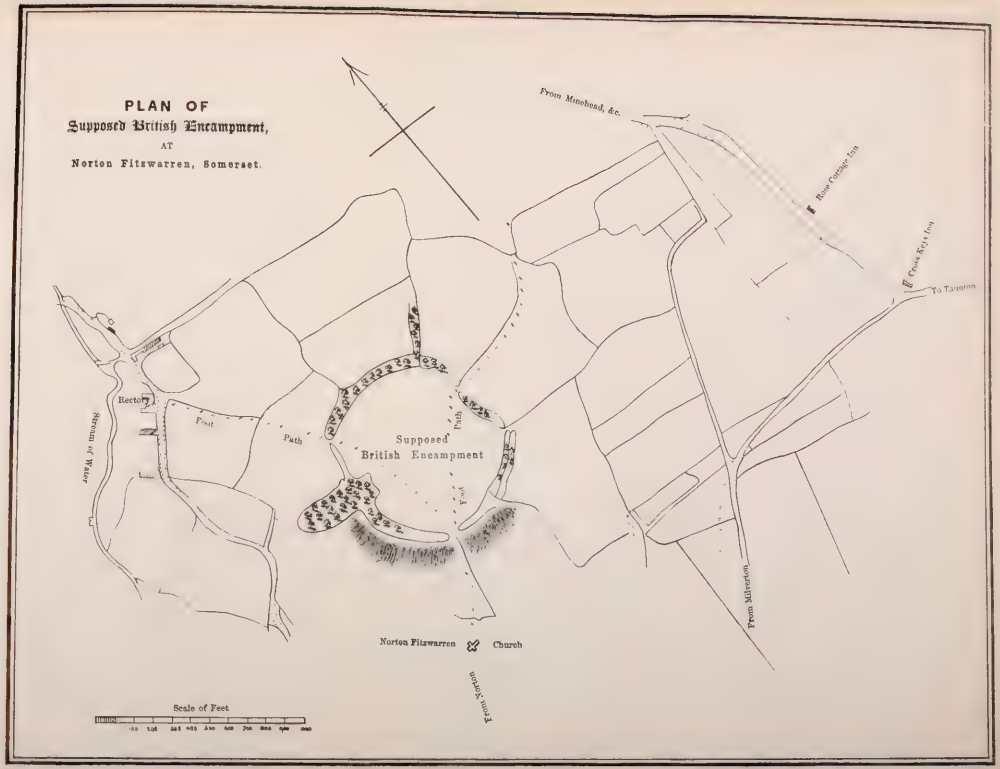
Many and various have been the conjectures of neighbouring antiquaries, as to the original constructors of this curious earth-work, and the purpose for which it was erected; as usual in such cases, the general voice has given it in favour either of the Romans or the Danes. Popular tradition says that it was once the haunt of a fierce and gigantic serpent, which having been generated from the corruption of many dead bodies which lay there, spread terror and death through the neighbourhood, some of whose ravages are said to be portrayed in the carving of the beautiful rood screen of the parish

PLAN OF

Supposed British Encampment,

AT

Norton Fitzwarren, Somerset.


PLAN OF
Supposed British Encampment,
AT
Norton Fitzwarren, Somerset.
From Minehead, &c.
Rose Cottage Inn
Cross Keys Inn
To Taunton
Rectory
Stream of Water
Path
Path
Supposed
British Encampment
Path
Path
From Milverton
Norton Fitzwarren
Church
From Wiveliscombe
Scale of Feet

church,* and one worthy gentleman has, as I understand, decided that it is nothing but an old lane; in which case our ancestors must have had a strange predilection for going round and round; and the anonymous writer whom I have before mentioned, supposes it to have been a stronghold of the Cangi, whom, on the authority of Camden, he states to have been the inhabitants of this part of Somersetshire, in the reign of the emperor Claudius, about the middle of the first century. In cases of such remote antiquity, where we have no documents to guide us, and particularly in a country, the surface of which having been under cultivation for many hundred years, must have undergone very extensive alteration since the time of the aboriginal Britons, it is evident that conclusions drawn from data so slender as those which have come down to us, can at best be very little more than guesses. I will, however, proceed to lay before you the reasons which lead me to incline to the opinion, that the ramparts on Norton hill do mark the site of an ancient British town of considerable importance.

Mr. Phelps, the historian of Somersetshire, speaking of the unfinished earthworks near Elworthy Barrows, informs us, that the Romans under Ostorius, having subdued the Belgæ and driven the Silures beyond the Severn, marched towards the west, to the territory of the Cangi, who occupied the

* To this tradition I shall have occasion to refer presently.

western part of Somersetshire bordering upon the sea. The Britons, on his approach, threw up on the Quantock hills, Dousborough, for their retreat, and commenced a similar stronghold on Brendon hill, near Elworthy, there to await the advance of the Romans. In the mean time the Silures and western Brigantes revolted, and threatened his rear, which obliged the Roman general to retrace his march, to secure his newly conquered territory. The Britons being thus relieved from the impending attack, ceased from their labours on Brendon hill, and left Elworthy Barrows as they now appear. The country having been tranquilized, there was no farther necessity for these defences.

The anonymous writer whom I have mentioned, supposes that Ostorius, having approached the sea, near the mouth of the Uxella or Parret, ascended the ridge of Quantock, at Cothelston, and from thence descending into the vale, marched to attack the British strong-hold at Norton, and being met by the aborigines at Conquest, obtained a complete victory over them at that place. Now, without deciding upon the reason which induced the Britons to leave the earth-work at Elworthy in an unfinished state, which might as likely have been owing to a defeat having compelled them to fall back upon the fastnesses of Exmoor, as to the countermarch of Ostorius, I see every reason to believe that both these accounts are substantially true.

Ostorius was at the mouth of the Parret ; the

Britons were entrenched at Dousborough, and probably holding the line of Quantock in force; in order to march westward, it was evidently necessary to dislodge them; and that a battle did take place on the top of Quantock is probable from the following facts. On the top of Bagborough hill are several cairns or heaps of stones, commonly called the Rowboroughs, which most likely mark the place where the slain were buried. A few years ago, a Roman coin was found near these cairns, and in draining an ancient alder bed, near Cothelston house, a bronze torque, and celt or battle axe were discovered, probably the ornament and weapon of some wounded Briton, who had retired to its shelter to die; Roman coins have also been found at no great distance from the spot. Having checked the Britons and driven them back to their entrenchment at Dousborough, it would clearly have been a most hazardous proceeding of the Roman General to have continued his western expedition, while a strong body of the enemy remained unsubdued in his rear at Norton; and in order to render the base of his operations secure, it was obviously necessary to attack that stronghold. Now, in order to go from the top of Cothelston by the shortest way to Norton, it would be necessary to pass through Conquest, indeed it is probable that a British way led through it, for the northern entrance and excavated approach to the ramparts on Norton hill are nearly in that direction.

There is no reason therefore that the Britons of Norton should not have met the invaders at Conquest, as the garrison of Dousborough had met them on Quantock. And their being totally defeated there might well have given the Roman name of Conquest to the place, and at the same time have been the cause of the evacuation of Dousborough, and the discontinuance of the works at Elworthy. It may perhaps raise a smile among my hearers, when I refer to the absurd legend of the serpent before mentioned, as a corroborative proof of this theory; but an eloquent writer has said, tradition is generally an accretion of error formed upon a nucleus of truth, and there is danger, if we cast away the tradition too hastily, that we may cast away the truth with it. Now that serpents have been generated from the corruption of human bodies is an idea common enough in classical antiquity, and whether it be typical of disease produced by that corruption or no, it is by no means an uncommon tradition in places where slaughter is known to have taken place; so much so, indeed, that wherever the antiquary meets with it, it is well worth his while to enquire into the history of the place.

An additional reason for supposing Norton to have been a permanent British town is this. There is still in existence a portion of an ancient trackway, probably paved in aftertimes by the Romans, leading from the British village Byng Ny

Pwl, or the village on the water, now corrupted into Bathpool, round the base of Creechborough hill to the turnpike road near Curry's gravel pits, from which it probably proceeded across the vale to the undoubtedly British fortification of Castle Neroche. Now, from certain indications on the ground, slight though they certainly are, it seems likely that a branch of this trackway crossed the river Thone at Obridge, or the old bridge, near the spot where the back stream from the fire-pool, (at that time the main stream) is crossed by a wooden foot bridge at its confluence with the present navigable river. Now, a line drawn from this spot through Plaice-street, the name of which indicates that a road existed there in the time of the Romans, would lead very nearly to the eastern entrance of Norton camp, and probably did actually lead there. It must be remembered, that neither the locks at the end of the Priory fields, nor the mills at Bathpool existed at the time of which we are speaking, and that consequently the river at Obridge must have been much less deep and more easily forded than it is in these days.

If I may again have recourse to tradition, I would call to your remembrance the ancient local rhyme

"When Taunton was a furzey down, Norton was a market town."

Now, this can hardly refer to Northtown on the other side of the bridge, as that is evidently a descriptive name, relating to its situation, with

regard to Taunton; but there is no reason why it should not refer to the ancient town which stood on the north side of the river Thone, at the distance of more than two miles from the modern town of Taunton.

The last argument in favour of this theory which I shall now bring forward is this. Collinson, following, I believe, Dr. Stukely, calls ancient Taunton, Theodunum, and speaks of a Roman road through it, though he says in a note, that Taunton was not a Roman town. Now, the word Theodunum, if such a place ever existed, is a Romano-british name, similar to Sorbiodunum, Camalodunum, and many others, signifying the fortified post on the hill near the Thone. Now, Taunton was founded by Ina, king of the West Saxons, in the beginning of the eighth century, about three hundred years after the final departure of the Romans from this island; and is certainly not situated upon a hill, but Norton is quite near enough to the Thone to have been called the town upon the Thone, before Taunton existed to deprive it of its claim to be so distinguished; and its ramparts remain to this day upon ground quite high enough to entitle it to be called the fortified town upon the hill.

I before observed that on points of such high antiquity, and with the very slight data before us, our conclusions at the very best are little more than guesses; but for all this I cannot think that we

shall be guilty of any very absurd credulity, if we think it not improbable, that the area contained within the rampart on Norton hill is the site of the ancient British town, Theodunum; which certainly, if it ever existed, might as far as date goes, have been a market town for many hundred years, while Taunton was a furzey down, or an almost impervious forest.

As for the idea, that it was originally a Roman work, the extreme irregularity of the plan, so different from their usually rectangular system of fortification, renders it highly improbable, while the importance of the fortifications, and particularly the deep excavations which formed the approach to its gates, make it as unlikely that it was a work thrown up by the Danes, in one of their hurried and temporary incursions.

The Turbaries between Glaston and the Sea.

BY MR. W. STRADLING.

ALL persons who have been in the habit of visiting Burnham, and the beautiful strand from thence to Brean-down, must have observed the continual changes of the sands on that coast. Although the strand, upwards of five miles in length, is still one of the finest in the kingdom, I recollect when, for a few years, it was nearly double its present width; and when a boy, I was taken in a chaise by my mother from Bridgwater to Stert Point, where there was a small inn for the accommodation of parties who visited the spot. That point is become an island, and at high tide, large vessels can now pass over what was once the carriage road.

This continual alteration of the features of the coast, has led many to suppose that at no very distant period, the sea flowed uncontrolled over the immense plain from Burnham, Berrow, and Brean, to and around Glastonbury, thus forming

what was then known as the island of Avalon. I shall however endeavour to prove, by the few discoveries I have made, that it was at a most distant era that the sea was confined to its present bounds, and that it was not effected at the time the Romans are supposed to have undertaken that vast work, of embanking the river Parret, from its mouth to beyond Borough-bridge, in order to reclaim and protect all the fine land on either side, as far as what was then the island of Athelney.

Occasionally from particular causes, such perhaps as earthquakes abroad, the embankments known as the sand-tots have given way, and it is recorded that in the year 1606 especially, the floods were so great, that the inhabitants of Glastonbury "feared a watery grave." I consider it the duty of every member of such a society as ours is, especially before it is firmly established, if he has made any part of the county his particular study, freely to give his opinion, in order that those who are more learned, may have an opportunity of either contradicting any particular theory, or adding information on the subject.

I cannot believe but that it was the work of the Almighty, and not that of the hands of man, when the sea was recalled from Avalon to its present boundaries. We know not the time when the Mendip hills were lifted by the force of fire and water, and so shaken to their foundations as to cause that stupendous chasm, known as Cheddar

Cliffs; but at that awful period is it not probable that the Steep Holme was divided from Brean Down? The strata of rocks are in both the same, and there is also a small vein of lead running through each of them. Supposing such to be the case, what would be likely to have been the result of the destruction of such an immense natural break-water? I should imagine the waters from the Severn and the Bristol Channel, would rush violently through the chasm, and carry with them the ruins of the shattered hills, which would be more than sufficient to form the foundation for the slab and sand to rest on, which now form the boundary of the sea.

When we pass along the road from Woolavington to Mark, known as the causeway, we see by the ditches that all the rich land, as far as the commencement of the turbaries, was formed by the slime from the sea. The sand-tots are continually augmented by strong westerly winds, and are occasionally repaired by the land owners.

We now come to the turbary, the edge of which, in the parish of Woolavington, bounded to the west the fresh water lake, which extended from thence to the isle of Avalon. It was of vast extent, including the lowlands of many parishes. It is supposed the Phœnicians visited Britain about the year 333, before Christ, and as they partially settled here with the ancient Britons, or first inhabitants, we can reasonably conclude that at that period the Avalonian lake (as I term it by

way of distinction) was used by the natives as a fishery, and for conveying their productions to the surrounding villages, as well as to their great Avalon.

I now proceed to describe the different antiques in my possession, from time to time discovered at the bottom of that lake, now by age and other circumstances formed into the turbary.—First, as to antiquity, I consider the flint spears, which are rarely found; I have never met with but four; they are all of the same shape and must have been fastened to a shaft by thongs. As we have no flints in the neighbourhood of our parishes, they might have been an article of commerce with the inhabitants of Dorsetshire or other distant settlements, where they abound. The next spear I obtained was found in the year 1831, and is the *Gwaew-fon*, used by the Britons of the interior. There are also several kinds of the *Gwaew-Hela* or hunting spear, used by them in their excursions, all of them most formidable weapons. I next had the good fortune to save from destruction a curious British pin or brooch, sometimes used after the arrival of the Phœnicians, for the purpose of fastening the robe at the neck. I next met with a fine specimen of the *Bwyell Arv*, or British battle axe, commonly called a celt, also *Bwyell-Lydan* or British hatchet, used for cutting wood. All these are of British brass and have been kept in a high state of preservation by the peat. I have also obtained three paddles or oars, by which canoes were steered.

They are of the same form as those used by the Welsh, at the present day, for their coracles. Also a flint, found four feet deep in the peat; perhaps it was used for striking fire, as half-burnt sticks of yew were near it.

I have to lament the loss of a most interesting relic, as only one has been found of the kind in this neighbourhood; it was a very large canoe, and was formed from an immense oak, and no doubt excavated by fire. I understand it was long known as "Squire Phippen's big ship," and it made its appearance partially in very dry seasons. I met with this information too late, and to my great mortification, I one day had a piece of the poor old "ship" brought me, and was told she had been broken up in the dry weather, and used by the cottagers for fuel. The oak was as firm as when the vessel was sunk perhaps 2000 years since, the peat in which it was discovered having such a wonderfully preservative power.

The next British remain I have to describe, has been considered unique by many learned antiquaries to whom I have shewn it, especially by Sir Walter Trevelyan, the president of our society. It is a bow of yew, formed evidently before the Britons knew the use of brass. Nothing can be more rude: the knob and point are perfect, and the groove formed in the largest part of the stick (for it is merely such as a boy would now cut for the same purpose) was evidently scraped out by a flint

instrument, in order to obtain the necessary elasticity. The knob and point on the ends for supporting the string, are the same as we see on the modern bows from Owhyhee. Shortly before the death of my revered uncle, Mr. Robert Anstice, what I considered to be the point of a British ploughshare was discovered on the border of the turbary at Burtle. It was formed of stone; and, though nearly deprived of sight by extreme age, Mr. Anstice carefully handled it with all the zest of an antiquary of thirty, and fully agreed with me, that it was what I considered it to be. I was sorry to hear the observation made by the Dean of Westminster, (whose illness we now so much deplore) at the inauguration of our society, that in his opinion "it was wrongly described, and he did not consider that the Britons used a plough, although he thought the antique unique." It was certainly sufficiently strong to make furrows for containing the different seeds sown by the natives on the partly reclaimed turbary.

Many other kinds of spears and swords have from time to time being found, in the highest state of preservation. It appears by the coins and other remains, that the Romans at a very early period after their settlement in Britain, inhabited Edington and the other villages adjoining, on Polden-hill; and being a very enterprising as well as working people, no doubt they considered the lakes on both sides the hill, to be worth the labour of

drainage, in order to turn them to better account than mere fisheries. What is now the river Brue, could never have been effectual in the winter, but perhaps was sufficient to keep the level dry throughout the summer; and the peat which formed the bottom of the lake, and which was an immense accumulation of vegetable matter, when kept drained soon became an excellent article for fuel to the surrounding inhabitants, and of course every year became firmer in consistence. That part of the turbary nearest the sea, was of course first drained, which accounts for the peat dug in Woolavington, Huntspill, Cossington, Chilton Polden, and Edington being so much more firm and heavy, than what is taken from Shapwick and that part of the turbary nearest to Glastonbury.

A great flood and hurricane must have happened before the lake was drained, by the descent of the waters from the hills, immense numbers of trees, principally oak and yew, were rooted up and forced into the bog. They are often found in the peat about a foot from the surface, and are termed by the delvers or peat men "underground oak." Hazel trees are also found with the leaves still perfect, and the nuts in such high preservation, that it can be ascertained that though the kernels were formed, they were but half ripe when the flood took place. I am not aware that there is any record, or even tradition, of the era when this awful visitation occurred.

I shall now endeavour to prove that the turbaries of Huntspill, Chilton Polden, Edington, Catcott, and Shapwick were occupied by the Romans, at least through the summer months, soon after their settlement in this country.—When a boy I was often taken to the Burtles by my late revered relative, Robert Anstice, and he often pointed out to me a number of mounds or *barrows*, as they were considered by many. They were of various sizes, many of them containing several hundred loads of the fragments of Roman pottery. Antiquarians were greatly divided in opinion as to the origin or uses of these earthworks. Some thought they contained the bones of the illustrious dead; others that they were heaps of ballast thrown from ships, when the bog formed the bottom of the immense lake; others thought they were rubbish from the numerous Roman buildings in the neighbourhood.

In the year 1833, when I changed my residence from Chedzoy,—almost adjoining that battle-field so fatal to the Duke of Monmouth, (the favorite and almost adored of the west,) as well as to his poor followers, and in which for nearly thirty years I had taken so exciting an interest as to its traditions, legends, antiquities, records, and other interesting matter,* —I found that wherever my guardian angel was

* The reader of Macaulay's History of this period, will not fail to call to mind his acknowledgments of the valuable information communicated to him by Mr. Stradling, in reference to this memorable spot.—*Note by the Committee.*

directed to place me, I could not rest without finding something at least to dispel idleness, if nothing more,—and when I looked back on the happy hours I had spent with my revered relative, who was no longer able to search for antiquities, as from old age his sight was daily worse, I thought it my duty at least to go to the field in which we had spent so many happy days, and endeavour to procure for him such antiquarian food, as had so long delighted his heart, that he might still feel with gratification, the produce of my labours. I remembered the cheering advice often given to me by my late universally respected friend Sir Richard Colt Hoare, who said, "Be a spade and shovel antiquary, a real working one, or none at all. If you will not dive your hand into the earth to bring out its treasures, you cannot expect your labourers, until they are broken in to feel an interest in your pursuits, to do so." I therefore determined upon such a search in the turbaries, as would make me fully acquainted with their productions, more especially with regard to the mounds.

I soon found they were a mass of potsherds of Roman black ware, and my attention was next directed to the question—How came they here? My labours were soon rewarded, for at the distance of a few yards from one of the mounds, I found at the depth of about eighteen inches, a square platform formed of clay, around which were several pieces of Roman ware, mixed with rude bricks

bearing the marks of straw, and formed by the hand. Upon making further search, I was soon convinced that I was standing on what was once a Roman pottery; and the bricks were for the purpose of keeping the rudely formed pitchers, pipkins, vases, and a sort of patera or plate, in their proper position, during the process of burning.

Those mounds were very numerous, and I concluded were formed of the potsherds of the different vessels broken whilst baking on the platforms of clay, which served for kilns. I should imagine the potteries were sufficient to have supplied the country with the common black-ware, (which is always found in the ruins of Roman villas) for a vast distance round. I afterwards found on one of the kilns in the parish of Huntspill, some small pipkins which were perfect, until unfortunately cut through by the turf scythe. Both peat and wood were used for fuel, as appears by pieces of charcoal. Scoriæ of iron and pieces of coal were found in some places. Clay and sand were to be had at no great distance. After the process of burning, all the perfect pieces were no doubt selected for package, and those with fire-flaws and other injuries, were thrown by, and served to form those numerous and large heaps of potsherds.

My venerable pitcher which I described in my hastily written "Little Book," some years since, was completely buried with potsherds, but is perfect with the exception of a small piece taken from the mouth

by a spade, and a crack or fire-flaw running round it, which not only rendered it useless for the purpose of holding liquor, but also made it much too fragile to bear carriage to any distance. I value this antique above all I have ever discovered, and consider it, as to preservation, a unique specimen of Romanized-British manufacture. All the Roman villas and other buildings in this county appear to have been hastily destroyed by fire or otherwise; and I have never heard of any vessels of pottery having been found in them entire. I value it from the situation in which it was discovered, as it at once convinced me, that my theory, as to the potteries was correct. No situation could have been more convenient for the workmen, as with brocks of turf, plastered with clay, they could form comfortable walls for their huts, and the various heaths served for an excellent covering. We often, in the present day, see decent cottages in the moor, built in this way, with the assistance of a frame work of wood, and the outside plastered with mortar. This custom might have been handed down by the Romanized-British inhabitants.

Many years since, a great many moulds, for casting Roman coins, were found, in the parish of Chilton Polden, in a field, on the Nidon, or the little hill, at the northern foot of the Polden hill, and extending from that village, through Edington, Catcott, and Shapwick. Upon the 26th day of August, 1835, almost adjoining

one of the pottery kilns, a large lot was found within a circle of about ten inches diameter, and a foot beneath the surface of the peat. The situation in which those moulds and kilns were found (only a foot beneath the surface) clearly proves what I suggested at the commencement of my paper, that the turbaries are not of recent formation, but were the same in the reign of Commodus, about 1670 years since. They were made from coins of Commodus, Severus of several types, Julia Pia, Caracalla, Geta, Julia Mamæa, Alexander, &c. Two perfect coins, one of Severus and the other of Geta, were found in them, and were of the debased white metal used by the Romans of this district.

I have never met with many of this kind of metal brought from any great distance. I have one from Chedzoy field, of Orbiana Augusta, and another from a large urn, holding nearly two gallons, found at the head of a skeleton, in a Roman cemetery at Yatton, at the foot of the encampment known as Cadbury-hill, and now the garden of the Rev. Richard Symes. The bodies were all deposited about eighteen inches below the surface, and the urn of black-ware was nearly full of second and third brass coins, of the lower empire. I one morning collected forty from the village shops, where they had been for some weeks passing for farthings.

In the year 1838, two small leather purses were found in a pottery mound; one contained the smallest kind of silver coins of the latter emperors, and the

other, the smallest size copper of the same era. Both purses soon fell to dust after exposure to the air. In the last named, was a beautiful little coin of Theodosius Augustus, the first or Great, and one of his wife, Aelia Flaccilla,—the latter very rare, and both so very beautiful, as perhaps even in the eyes of a barbarian, to prevent them from mutilation. I think it very evident that the clippings from those coins were used for casting some of the larger size in the moulds.

At the opening meeting of our society at Taunton, the Rev. Dr. Buckland alluded to those moulds and clipped coins, which I had deposited in the Museum, and considered they afforded proof that among the Romans there were forgers and clippers of money. They were taken there by me, with the hope of proving the reverse, and that those base Roman coins were not forgeries. Who for an instant could have taken either of the coins, found in the moulds, for silver? and what proof have we that the commanders of the Roman forces stationed here, had not a right to coin? I am truly sorry to differ from the opinion of the Dean of Westminster, and still more so, from that of a friend, who through a long life, has been always respected by all those of the higher class, who have had the honor of his acquaintance, who has always been esteemed for his learning in every department of science, and above all, has always been revered by the poor around him, young and old, to whom he has been

a spiritual father and kind benefactor. I am sure all will join with me in this feeling when I mention the name of the Rev. John Poole, of Enmore. He considers those base coins to be the work of forgers, and was one of the party when so many moulds and a few coins were found on the Nidon.

I believe his argument is, "if those coins were sanctioned by legal authority, how came the obverses of so many Emperors and Cæsars to be in circulation at the same time? Why had not the makers of the moulds taken the reigning Emperors only? My reply is, that if I had the same work to undertake, I should select all the best coins I could find, as to preservation, for the purpose of stamping the moulds, so as to obtain the highest relief on the coins to be cast from them. I believe in all countries, coins of different reigns have been generally in circulation, and in the reign of George III, when the silver coins were much worn, they were called in, and in order to enrich my cabinet, I was allowed by my friends who were partners in Mr. Stuckey's bank, to attend daily at their receiving house, when I procured crowns, half-crowns, shillings and sixpences of Charles II, James II, William and Mary, William alone, Anne, George I, George II, and George III.—We have at present in circulation, coins of George III, George IV, William IV, as well as those of her present Majesty, Queen Victoria.

In order to support my argument, I shall con-

clude by quoting a few lines from a description of the Pitney Villa, by Sir Richard C. Hoare, which I consider high authority, as to the right of coining granted to the Romans of high rank. He says "I consider therefore that this fine villa belonged to the Præses loci or lord of the manor, who had his vassals settled around him, employed in certain manufactories, such as mining, COINING, &c., &c." Sir Richard told me he had always considered that Romans, high in office, had the privilege of coining.

NATURAL HISTORY

OLD MARKET CROSS AT BRIDGWATER,
(SINCE DESTROYED.)

Bridgwater High Cross.

BY MR. W. BAKER.

THE Cross here represented stood on the Corn-hill, at Bridgwater, opposite the entrance to High-street. It was used as a market place for many articles, especially for fish, "and over it was a cistern, to which water was conveyed from a brook, by an engine fixed in what was formerly called the Queen's mill, and from this cistern water was carried into most of the streets of the town." —*Beauties of England*, 1764.

The cross was also used for many public purposes, such as for addressing the people, for proclamations, &c.

Oldmixon says "the Duke of Monmouth, after he was proclaimed king at Taunton (in his fatal rebellion) marched to Bridgwater. He was proclaimed in this town at the high cross by the mayor and his brethren in their formalities, and here his declaration was read." Many persons remember there having been on the cross the very appropriate inscription "*mind your own business.*"

This handsome old cross was taken down about fifty years ago. It was no longer required for sending water through the town; the mill which supplied the cistern was used for grinding corn; and as a market place, it was superseded by new and more commodious buildings.

Bridgwater Old Bridge.

BY MR. W. BAKER.

THE building of the stone bridge over the river Parret at Bridgwater, which is represented in this engraving, was begun in the time of king John, by William de Briwere, and finished in Edward the first's reign, by Sir T. Trivett, a gentleman of Cornwall "whose arms being a trivet," says William of Worcester, "were affixed to the copings of the structure."

When Bridgwater was stormed and taken by Cromwell's forces in July, 1645, this Bridge obstructed the successful advance of the storming party for two or three days.—Oldmixon in his history of the royal house of Stuart, says "Captain Rynolds, of Cromwell's regiment of horse, at the head of the forlorn hope, drove the cavaliers from the drawbridge at St. John's, which was let down and a passage made to the east gate, which was soon forced open, and Rynolds, entering Eastover with his horse, scoured the streets of that part of the town, up to the stone bridge. There was at that time a gate at the bridge, where the enemy (the royalists) made barricades, and drew up a draw bridge."

The massy piers of this fine old bridge obstructed the passage of barges up the river, and often occasioned much damage, at the first rush of the tides; in the year 1795 it was taken down, and the present handsome cast-iron arch erected in its place.

OLD BRIDGE, BRIDGWATER.

(REMOVED IN 1795.)

NATURAL HISTORY

Wells Cathedral.

BY THE REV. D. M. CLERK.

THE history of the noble edifice we are about to examine is intricate,—authentic records are not easily found or searched, and with the exception of the "Liber Albus" and the "Liber Ruber" (which the Dean and chapter have kindly placed at my command) I have only had the common authorities to guide me.

At the beginning of our task, the question arises, "When were the first ecclesiastical buildings erected at Wells?" and it is not easily answered. There are certain traditions concerning king *Ina* and, I may add, *Kenulph*, (there is a *reputed* charter of his in the Liber Albus) which must be set aside as wholly unworthy of notice. Proceeding on,—even to the beginning of the 10th century, we are puzzled by false documents of early date, which have led astray even the old chroniclers. The story of the Bull of Pope Formosus is probably familiar to all: it is difficult to understand it, but as "Roger of

Wendover," "Ralph de Diceto," and above all the "Monk of Abingdon," (who wrote before the end of the 10th century,) mention the consecration of seven bishops in one day, I think the conclusion at which Wharton arrives in his note on the tract of the "Canon of Wells" in his "Anglia Sacra," is by far the most probable which can at this time be gleaned from history. It is this,—1st, That the Bull of Pope Formosus, placing the country of the West Saxons under an Interdict, (on account of the non-appointment of bishops,) is altogether false; a Bull professing to have been issued A.D. 904, 5, or 9, could not be his, for he died A.D. 996. 2ndly, That Edmund the Elder, and Plegmund, Archbishop of Canterbury, *did* hold a *Synod* A.D. 904 or 5. 3rdly, That it was there determined to found three new bishoprics in the kingdom of the West Saxons, to be taken out of the sees of Sherborne and Winchester. 4thly, That execution of the plan was deferred till the death of the prelates of those sees, (who were yet alive, and both of them men of renown, one of them being '*Asser*,' the other '*Dinwolf*') but that in the year 909 or 910, both Winchester and Sherborne becoming vacant, five bishops instead of two, were appointed in their room. These, with the bishops of Dorchester and Chichester, whose dioceses became vacant at the same time, made the seven.

Amongst the new sees founded, was that of Wells. The first bishop was named *Æthelm*, (said to have been a monk of Glastonbury, but that is uncertain).

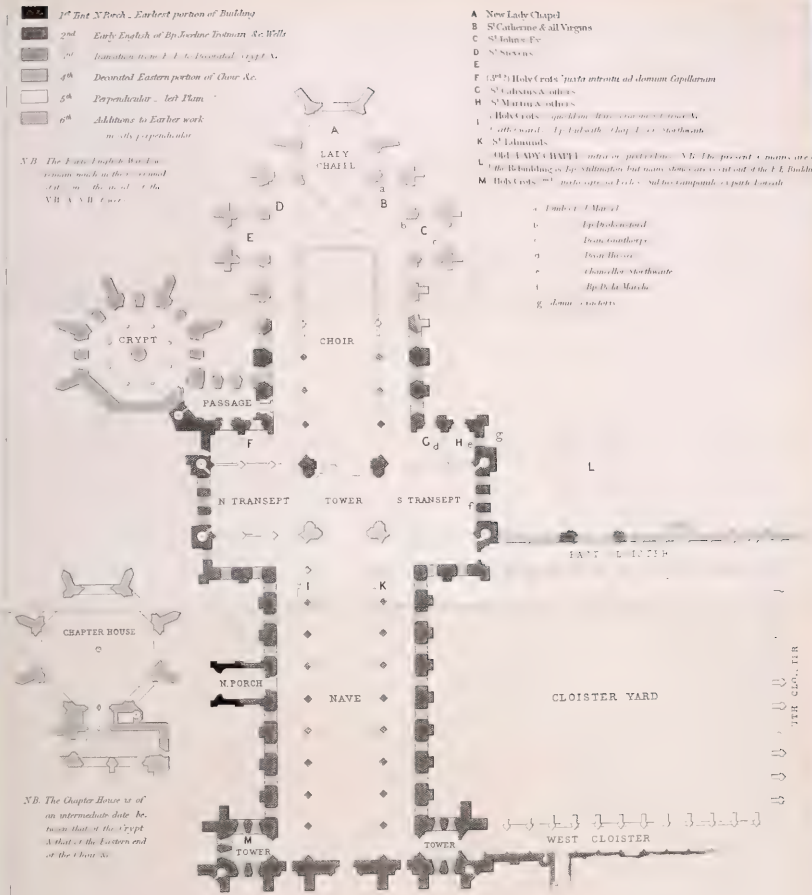
Whether he erected any buildings, I know not: probably they were of wood if he did; but be that as it may, I cannot find the slightest indications of any Saxon buildings connected with the cathedral of Wells at present in existence.

Passing on to the 'Conquest,' the Prelate whom we then find presiding over the diocese, was *Giso*. On coming to his bishopric 1060, he found ten canons at Wells, who were reduced to beggary by the Danes, and it was not till after William was settled on his throne, that he was able to do anything effectual for their benefit. He then increased their number, built them a *cloister*, *dormitory*, *and refectory*, and made one of them, by name *Isaac*, their prepositus. The only thing like a remnant of any of these buildings, that I can trace any where in the neighbourhood of the cathedral, is a single capital standing in a wall about twenty or thirty yards west of the eastern cathedral archway. After Giso's death, John de Villula, "Natione Turonensis," * transferred the episcopal see to Bath, and for the next fifty years, it is not likely that much was done to the cathedral of Wells. In the year 1136, Robert, a monk of Lewes, succeeded to the episcopal see. He was taken prisoner at his house in Bath, by a party of Stephen's soldiers, and carried in captivity to Bristol, (he taking the side of Matilda). After his release,

* I almost question whether he was a foreigner; his name occurs in William of Malmsbury in company with Herbert de Losing; they were *I* believe screwed by William because they were *Saxons*.

bishop Robert, in due performance of his sacred calling, set himself to the task of settling the disputes which had been carried on for some years between the monks of Bath and those of Wells, and also, arranging the manner in which the bishops of the see should for the future be elected and styled. In doing so, we find he was the first who appointed a Dean at Wells. After this the old chronicler tells us, he dedicated the church of Wells, Joceline of Sarum, Simon of Worcester, Robert of Hereford, being present ;* and the building which was in ruins he admirably repaired. That bishop Robert's reparations were in the Norman style, I have little doubt. Some say he rebuilt the church at Bath; others, that he only finished what his predecessor, John de Villula, had begun. The few early portions which remain in Bath Abbey, are completely Norman, and totally unlike any to be found in Wells. The only portions of Wells *at all likely* to have been built by bishop Robert, are parts of the North Porch, and perhaps the Crypt. I have mentioned the fact of his having been the first to appoint a Dean, in order that I might give as fair a probability as possible to the idea that he *did* build the crypt and *a* chapter house over it. But the crypt,

* Dedicavit ecclesiam Wellensem, Joceline Sarum, Simon Wigorn, Rob. Hereford ¡resentibus; multasque ruinas ecclē destructionem ejus in locis pluribus comminentes egregie reparavit.—Can. Well. Lib. Alb. Ang. Sac.



GENERAL PLAN OF WELLS CATHEDRAL.

from any thing I can see, (though it has at first glance on the inside a Norman look about it,) is far more likely, in my opinion, to have been built at the *close* of the early English period, than before its beginning. With regard to the north porch, by and bye. Be kind enough to look at the plan. You will see the church at present is a Cross. North and south towers at the west end,—Cloisters at the south side, running three sides of a square ;—Porch on the north,—Chapter house on the north.—Then at the east end of the choir, a second transept, formed with chapelries on the north and south side. This second transept, I believe, is peculiar to English churches, and was probably adopted because it gave room for two more chapels in the path of procession. In continental churches its place is supplied by polygonal or circular chapelries, at the north-east or south-east corners and down the sides. After these transepts and their chantries, comes the "Lady Chapel," with a polygonal apse at the extreme east end.

Now, if we except the present cloisters, the chapter-house, with its staircase, all the towers above the line of the roofs near which they stand, with the whole of the east end, as far as two bays in the walls of the side aisle, (three arches in the choir,)—the remainder of the cathedral is of the early English period; and I honestly confess I can trace no tokens that any portions of it, (except what is noticed below,) were built at dates differing

from each other, further than we might reasonably suppose they *would* differ in a work of such magnitude, *and* which must have been carried on through fifteen or twenty consecutive years. The details of the west end in such a work, (for they always built from east to west,) might be expected to be, (as we find them in the work before us,) less harsh and more elaborate than those eastward of it.

The date when the early English style was introduced in England is marked with sufficient exactness. It happened that Canterbury Cathedral was then building, and almost daily account of the progress of the edifice has come down to us from the pen of the contemporary monk, Gervase. We find it recorded by him that in the year 1178 the chief mason, (who had *begun* the new works,) William of Sens, fell from the scaffold and injured himself so severely that, after staying about two years in England, he was obliged to resign his master trowel, which Prior Conrad gave forthwith to "William, the Englishman." Now, this William, the Englishman, continued the work, "according to the *new fashion*" which at that time began to prevail—and the work of William of Sens is Norman—that of William, the Englishman, is pure early English. It is scarcely probable that William of Sens, or Conrad his master, would have employed the Norman mode, on a work like Canterbury cathedral, (which, as William of Malmsbury tells us, astonished all beholders,) had

they known anything about the early English style. I give this opinion with the greater confidence, because I think it is held by Professor Willis. The earliest date which we can assign for the commencement of the early English style, is about 1180; and this agrees with ascertained dates of buildings of this period, (*e. g.* the Temple church consecrated by Heraclius, 1184). Now, bishop Robert, of Bath and Wells, died at latest 1160, A.D., and the see was vacant seven or eight years, after his death. It seems very unlikely that any *visible* portion of the buildings (as they now are) should be *his* work—the present edifice *may* stand on old foundations, and the ancient thickness of the wall *may* have been preserved; but that is all, (at least in my opinion) which *can* be.

Now as to the north porch; Portions of this I believe to be somewhat earlier than the rest of the work. In the first place I say this, because the first "string course" that surrounds it, has not the same level with the string on the other old portions of the building; and again the "coursing of the stones," which is beautifully kept on the north side, and carried even round the buttresses, to the full height of the side wall, is *broken* in the north porch. I am not disposed to attach as much weight as Professor Willis did, in his able lecture on Salisbury cathedral, to the "coursing of the stones;" still it is plain, that the builder of the greater portion of Wells cathedral looked upon the keeping of the

"courses" as an element of beauty, and would probably *not* have broken the "courses" in the manner in which they *are* broken, had he built the porch from the ground.* I am disposed to assign the older portions of the porch to Reginald Fitz Joceline, son of that Joceline bishop of Sarum, who was present at the dedication of the church, by bishop Robert. † There is one little circumstance, which, though of no very great weight, is worth mentioning, as it *may* bear upon the assignment of this portion of the building to Reginald Fitz Joceline. Before he was consecrated, in Savoy, he was obliged to take an oath that he had nothing to do with the murder of Thomas à Becket. Now on the north porch is sculptured the legend of the murder of Edmund, king of East Anglia, and the fabled circumstances which led to his canonization, as related by "William of Malmsbury." It seems to me, not unlikely, that one, who was haunted with an accusation concerning the murder of a person who was *about to be*, or was *just* canonized, should cause to be sculptured on the door of his cathedral, the legend of the murder and consequent canonization of St. Edmund.

* Perhaps I ought to say here that the string of the crypt is also on a different level, it is much of the same pattern and ties in with the rest.

† It is possible that Reginald might have been with his father here on that occasion, as he held office; he was enthroned November 1174—died 1191, and was Bishop during the precise period at which I think the Porch was built. The canon of Wells says of him, "Multas Prebendas in ecc: fundavit de novo, multaq: alia bona fecit Bathon: tum Wellen: Ecc."

The remainder of the early English part of the building may, I think, be given, as it usually is, to Joceline Trotman de Welles, who was consecrated May 28th, 1206; died November 19th, 1242. All accounts say that he pulled down the greatest portion of the building,* which had fallen into decay, particularly that part west of the choir, (even what bishop Robert had wrought,) rebuilt it from the ground, and hallowed or dedicated it October 23, 1239. If he began the building soon after he came to the bishopric, it must have proceeded at a very slow rate, for some years. In 1208 he was banished by king John, for having at the command of the pope published an interdict. He was five years abroad in consequence, and during all this time and six years more, he was engaged in a struggle (doubtless expensive) with the monks of Glastonbury, who did not like the union of their abbey with the see of Wells. The severance was obtained May 18th, 1218; and from that time calling himself, instead of Bath and Glastonbury, "Bath and Wells," he set to work in earnest about the building. His life was spared for more than the 20 years, which it took to complete and dedicate it: to use old Fuller's quaint words, "God, to square his great undertakings, giving him a long life to his large heart." The principal features of his work are; *on the outside*—the very elaborate en-

*Ecclesiam vetustatis ruinis enormiter deformatam prostravit et a pavimentis erexit dedicavitque.—"Canon of Wells."

richments of the west front;—the management of the west window;—the exquisite proportion of the parts, very far superior to those of Salisbury, (especially the windows and niches), and the very remarkable plainness in the remaining early English portions. *Within the Church*—the TRIFORIUM (which has single arches, with small openings, instead of double or triple arches, with larger openings, as is often the case in early English buildings.) The great plainness outside of all but the west front, is remarkable; and inside, the plainness and simplicity of the groining, excepting that of the west towers.

If there was any break in the building, the most likely spot where the works were stopped, (during Joceline's absence, &c.) is the first buttress, east of the porch on the north side. I shall not undertake to mention the sculptures.*

The next portion of the Church to which I shall direct your attention, is the whole of the Chapter house, together with the staircase leading to it. A most splendid work of William de la Marche! He was elected to the see A.D. 1293, died A.D. 1302. The "Canon of Wells" (Godwin, *English edition,)* and in fact universal tradition, assigns the building to him, and to the well disposed of that day. It furnishes a most beautiful specimen of the precise style of architecture which prevailed at the period,—when the early

* See Mr. Markland's address *supra* in the Proceedings, page 54, *et seq.*

English was verging into the decorated, and gaining mullions and tracery. I would not say that the Crypt (which has no mullions to the windows, and has the dog-toothed ornament,) was not *begun* by his predecessor, bishop Burnell; and that the magnificent superstructure, the chapter house, (which in its interior decoration bespeaks some few years later date and progress in the style,) was *wholly* finished by him. I think the works were incomplete when bishop De la Marche died, and that bishop Häselshaw completed them. The words of the Canon of Wells concerning the tomb of bishop De la Marche, are significant—"ubi olim fiebant multa prœclara miracula."

On examining the windows in the staircase, you will see that they have four arches enclosed in a fifth, with a piece of wall above them, pierced and moulded. The mouldings are very nearly those of the early English period, as are the capitals of the shafts. The windows of the chapter-house, have regular tracery of what we may call the "segmental form," being composed of circles or parts of circles,—the mouldings still very round in their form. The ornament is changed from the dog-tooth to the ball flower. One single portion of the west front must have been added at this time,—the pinnacle in the centre.

I would now direct your attention to that part of the church extending from the three last arches of the choir to the eastern end. This I

without doubt, assign to bishop Drokensford, who in the month of January, 1325, obtained an indulgence of forty days for the contributors to the new works of this church. There are several questions for antiquaries connected with this portion of the building; but the architecture so completely corresponds with the style I *expected* to find and *do* find at that date, that I have not the slightest hesitation in saying that almost all the work must have been completed between A.D. 1320 and A.D. 1340; for I do not affirm that the work was perfectly finished at the time of bishop Drokensford's death, A.D. 1329. On the contrary I believe the choir owes much of its internal decoration to bishop Ralph de Salopia, the successor of bishop Drokensford,—probably the "Jesse" window and its glass; unless this was the window bishop Harewell filled with glass. Godwin says it was the west window, the Canon of Wells only says a large window. *One* of the reasons for the mistakes which have occurred in regard to this part of the building, is very easily disposed of. The "canon of Wells" writing in bishop Bubwith's time (not later than A.D. 1424,) while speaking of bishop Bitton, says of him, "In novâ capella B. Mar. Virg: tumulatum," and Godwin says, speaking of the same bishop, "He lyeth in the midst of our Ladye Chappel." It has been concluded from this (by Mr. Britton for instance,) that the 'novâ' meant *new* in Bishop Bitton's time, who died A.D. 1264, and therefore that the Lady Chapel

must have been built in his day; whereas, it really meant, *new*, but a little before the canon of Wells's time, and in contra-distinction to the *old* Lady Chapel, which was existing in the time of the canon of Wells, and of which I shall speak by and bye. How the body of bishop Bitton got into the new Lady Chapel I cannot positively assert, some persons may think that formerly, the old church extended far enough to take in the place where bishop Bitton lay. I scarcely think it did, for it is certain from all the old accounts, that the high altar near which Dudoc and Giso,* were buried, stood somewhere in a line of the third arch of the choir reckoning from the east end. In all probability, the old church had an apsidal termination, with north and south chapelries; but still the apse could not have extended in my opinion far enough into the present Lady Chapel, to take in any tomb of bishop Bitton's there; added to which, we have in the Liber Albus, a certain document of bishop Drokensford's, which establishes new chantries to the Bittons in the (new) Lady Chapel, they before having had chantries in the *old* Lady Chapel. I think it most probable that he moved the body of bishop Bitton to his new work; with what idea—I will not venture to say; only—we read concerning the tomb of one of the family "*Ubi nunc presens fulget miraculis.*" The building was going on, and contributions were

* Bishop Dudoc was buried on the south, and bishop Giso, on the north side of the old high altar.

no doubt wanted! Perhaps I may as well mention here, two circumstances connected with this part of the building,—1st, on the *South* side, the crockets on the new clerestory windows and on the ridge of the lady chapel transept gable, are fleurs de lis—further, there are fleurs de lis sculptured and standing out boldly from the slopes outside these same windows, on both north and south sides. Now, on the tomb which the late dean restored in the Lady Chapel, though there are no armorial bearings, the ground on which the Agnus Dei is painted, is powdered with *fleurs de lis*. I conceive this to be the tomb of one John Marcel, a canon of Wells, and think the fleurs de lis was a favorite emblem with him. He in the year 1341,* by a document p. 286, Lib. Alb. ordained a chantry in that part of the Lady Chapel, viz. *the Chapel of St. Catharine and all Virgins*, where he expressly states his late bishop (Drokensford) lies buried. He was from this document evidently a friend of bishop Drokensford and wished to lie near him in death. May we not reasonably conclude he had taken a great interest in his buildings? (perhaps he had given largely to their aid,) and he left the fleurs de lis (not his name) as the only visible record of his liberality or his identity. But another thing,—if we look at the tomb of bishop Drokensford, we shall see on it, four—of what the Herald's College calls *pastoral staves*, "azure" and "or,"

* The Architecture of the tomb agrees with the date.

W. T. Collings del. Feb. 22. 1851.
Photog.d on Anast.
Wells Museum Feb. 22 1851.

Easternmost Window, South side of Chancel.

In the Jamb of the same Window.

On the Gable of small Transept, S. side of Chancel.

W. J. Collings delt et Anastat:

Wells. Feb 24th 1851.

Wells Cathedral, (Details.)

COWELL'S ANASTATIC PRESS, IPSWICH

"quarterly,"—what the bearing is, really, I cannot say; *I think*, it has more to do with falconry than theology. There appears on the highest eastern gable of the choir, this very same thing; at least if it is not a broken cross, (which after examining it from the leads, though not closely, I do not think it is.)*

Evidently bishop Drokensford's tomb, and the tomb on the opposite side were founders' tombs: they are in the places of founders' tombs, they exactly correspond with each other, and had canopies *originally* over them. The other tomb (opposite that of the bishop,) *may have been*, that of the brother of the bishop, Richard Drokensford, precentor and chancellor, A.D. 1327, but *I* rather think not. In regard to this portion of the church, I would direct your attention to the beautiful way in which the early English portions of the choir wall, east of the tower, have been sculptured, to accomodate them to the new decorated part. The groining, &c. is also well worth study, all the vaulting of the choir being of this period, as well as, all east of it. There is what may be called a double parapet, round the body of the church: the upper portion was added at about this time. A stone has fallen out, *west* of the north porch, which shews how the new was placed on the old early English finish.

I would next direct your attention to the upper

* N. B. There is a Cross just under.

part of the large central tower * above the roof, with its inverted arches inside. † I have not been able to discover the slightest record of the building of these portions, but I suspect they were bishop Harewell's work. He was a munificent patron of the church, a builder, and being the chaplain of Edward the Black Prince, must have known "William of Wykeham," the introducer of the perpendicular style and grand master of the Free Masons of that date. The architecture bespeaks William of Wykeham's period, when the decorated was changing to the perpendicular. The niches and the figures at the corners of the tower, were evidently added long after; the mouldings do not correspond the one with the other, and they are of later perpendicular character. It does not appear that the tower ever contained bells; in fact

* Here again early English work has been altered into perpendicular, and the capitals of the tower pillars have lost all their beautiful early English carving thereby. I would also notice that the ashler near the south triforium, bespeaks some slight displacement to have taken place, either from the scaffolding or fixing of the centering, when the arches were added. It is possible that injuries which happened to the *capitals* at the same time, may have caused *their* alteration.

† How this Tower originally finished is a curious question. The heads of the elaborate and beautiful combination of early English arches inside, extend some feet above the level of the early English string course on the outside. After attentive examination, I am inclined to believe that originally there was a square early English tower of considerable height, whether finishing in a broached spire or not, I cannot say; but the early English mouldings, &c. have been cut into new work for some feet up on the outside. The stones are evidently portions of the old tower, the work new.

before bishop Harewell's time there is no mention of any but one bell, given by the first bishop Bitton, and called in Godwin's time, the 'sermon bell,' probably of very small size, and not one of any peal.*

We now pass on to the west towers. The Canon of Wells states that bishop Harewell "apposuit duas partes expensarum" of the south west tower, which Godwin translates, "contributed the third penny." It has been supposed from this that the south west tower was built in bishop Harewell's time. I would venture to translate the Canon's words into "laid by two-thirds of the expenses," placing the money perhaps at interest, till the chapter had accumulated sufficient to build the south west tower. I would venture to say the south west tower was *not* built in bishop Harewell's life-time. † It may be that Godwin was mistaken, but, I do not think that either his words, or those of the Canon of Wells, shew that they had the slightest idea of the south west tower being built in bishop Harewell's time. The south west tower and the opposite north west tower are pure and not *very* early perpendicular buildings. It is certain that bishop Bubwith's money built the north west tower, this his *will* proves, and his image and

* The Masses heretofore were notified "Pulsatione Classicorum"—whether this proves there were no bells, and implies trumpets, I will not undertake to say. I am told that on the continent a trumpet is sometimes used even where they have bells. The present bells are all modern.

†See Bishop Harewell's will in appendix.

arms still remain conspicuous. That the south west tower was built perhaps partly with bishop Harewell's money, but in bishop Bubwith's time, is more than probable, from its corresponding stone for stone with bishop Bubwith's,* except his statues, &c., and *from* the will, (which see in the appendix.)

The present cloisters stand very nearly on the site of the old; the early English door-ways, which remain, prove they must have been exceedingly beautiful; the east side of the present cloister is said to have been built by bishop Bubwith; and to bishop Beckington, (bishop from A.D. 1443 to 1464-5,) is given the west side. The greater portion of the work I conceive to be bishop Beckington's; for though the entrance to the library has bishop Bubwith's arms on the glass, there does not seem to be any sufficient difference in the building, to prove that bishop Bubwith finished the east side during his life time; while the holly appears intermixed with Beckington's shields, on the west side, as if bishop Beckington was building *in memoriam*. The south side might partly have been built

* How these towers were originally finished is another curious question; I incline to the belief that they had spires, and whether they ever had pinnacles on them I cannot say; if the present capping be original in the south tower, certainly they never had, but I doubt this. That in the original design of the towers, pinnacles were contemplated I have myself no doubt; such an elaborate combination of shafts bespeaks it, especially as there are pinnacles now standing on several portions of the ascent.

by the contributions of the liberal in those days; but a "camel" on the south west gable, shews,—that a canon of that name, (probably W. Camel, sub-dean of Wells, A.D. 1350,) had some share in the building, and that some portion of the old work was left. The groining of the cloisters is good, and the way in which the ribs come down on the shafts is worthy of observation. The perpendicular tracery in all the windows;—and the shafting, with the gallery of the west window inside, was inserted about this time.

Having mentioned the chief portions of the building, I will now return to the consideration of the various chapelries, altars, &c. I have bestowed some pains in their investigation, but though many interesting particulars have been discoverable, I have not satisfactorily identified several of them. In bishop Robert's time, there were apparently three principal saints to the church,—St. Cross, St. Calixtus, and St. Andrew, the latter possibly the saint of bishop Robert's own dedication. This appears from a document, (page 246, Lib. Alb.) where three festivals are spoken of as above. There were *two* (*I* think *three*) chapels of the Holy Cross, on the north side of the church. The first, "Juxta egressu eccles: subtus campanile ex parte Boreali, A.D. 1299," under the north west tower. Possibly this corresponded to the first station in the path of the processional.—The second altar ("quoddam altare") of H. C. was situated, "coram imagine

St. Crucis parte Boreali alti campanilis," (p. 130 and 283-4, Lib. Alb.) This altar of the cross most probably slightly changed its place in latter times, was moved one arch nearer to the north door, and was then situated in what is now called bishop Bubwith's chapel. Probably that bishop changed its position; certainly he ordained an altar, somewhere in that part of the church. This chapel as it now stands, has a curious history.* In A.D. 1424, as I have said, an altar was ordained by bishop Bubwith; there are his arms to mark it, and a portion of a pillar cut away to insert them; but the chapel was built, *I* have no doubt, by one, who in the humility of his earnest piety wished to remain unknown. He says "erigitur de dono Celesti Cantaria," and then proceeds to give directions concerning the manner of the service to be performed there. His name was "Storthwait," chancellor of Wells, A.D. 1451. The Deed is one of the most beautiful proofs of heartfelt unostentatious religion, (of course according to the Romanist form) that I ever remember to have met with in such a document (it occurs p. 506, Lib. Alb.) We learn from this deed that the altar was originally called, the altar of the Holy Cross, and that the chantry

* I believe bishop Bubwith built only a wooden chapel over his altar, similar to that which formerly stood on the opposite side (St. Edmund's chapel,) and shortly after re-built it there as it stands at present; but as there is room for a different opinion, I beg to refer my readers to the two documents from which I gather my information, viz. bishop Bubwith's will, and an extract from Storthwait's document, in the *appendix*.

was afterwards named "Cantaria Sct: Salvatoris, Beat: Virginis, et omn: electorum Dei." The marks of the niches on the back of this chapel bear out this dedication. The Canon of Wells identifies it as the chapel where the usual early mass was said, by the large marble slab, under which bishop Haselshawe lies buried, (just in front of it), but does not say it was bishop Bubwith's building, which he probably would have done had bishop Bubwith built it; for bishop Bubwith was his patron. The third chantry of the H.C. which was the oldest, as I think, of the number, and the one which bishop Robert found there, was in the north transept—east side—inside the screen, near the door, leading to the chapter room,—juxta introitu ad domum capillariam.* It continued to the time of Henry VIII, as the Liber Ruber testifies, and was probably the mark of the original dedication of the church. On the north side were three or four other chantries, the sites of which I am unable quite to allot. The altar of St. Mary Magdalene (one of them) was in existence A.D. 1271 or even 1263, "ex parte Boreali chori."† There was an altar of St. Mark, but whether that was so called, because the money was paid by the brothers of St. Mark, at Bristol, I cannot say. The situation of these two altars possibly might

* "Juxta ostium capituli" in Lib. Alb. Speaking of a gift of W. Wellington, to that chantry.

†There was an altar in the crypt. ? to whom dedicated.

have been by the side of, or associated with, the altar of the cross going to the chapter room. There was also a dedication "Corp : Christi," and one to St. Stephen and others, on the north side.* St. Stephen's was called the Coombe Chantry, (Lib. Rub.) and I think was situated north-east of the lady chapel. There is a portrait of a St. Stephen there, on the glass, by the side of other bishops, and in a MS. in the British Museum (Harl, 1682,) there is mention of a St. Stephen's chapel, apparently at that end of the church ; added to which I find a chantry founded by Walter Hull, archdeacon of Bath and sub-dean, A.D. 1342, in St. Stephen's chapel ; and I have a sort of suspicion that the founder's tomb, corresponding with bishop Drokensford's, may be belonging to him. The chapel south-east is that of St. Catharine and all Virgins, sufficiently identified by the Catharine wheel in the glass, and the tomb of bishop Drokensford. St. John's chapel was in the south transept of the lady chapel, identified by the following apparent contradiction in the old writers. The Canon of Wells says, bishop Drokensford lies "ante altare Sct. Johann:" The Liber Albus tells us he was buried in the chapel of St. Catharine and all Virgins. The fact is, his tomb lies just between the two chantries, rather nearer the altar of St. John than that of St. Catharine. The next chantry is that of St. Calixtus, who had several associates;—it is a very ancient de-

* See the extracts from Har. MSS. in app.

dication. Dean Husee lies buried there. South,—beyond that, is the chapel of St. Martin (and others), connected with the De Lillesdon tombs. Before chancellor Storthwait's tomb was placed in this chapel, there was a door there.—It led to the *old Lady Chapel*, in which were several altars—one to St. Nicholas. This Lady Chapel was built, if not by Joceline de Wells, by William Bitton, (Lib. Alb. 124, A.D. 1227). It had another entrance from the cloisters, and was called Cap: B: Virg: intra Cloist: It is evident that Joceline found no chapel of the Blessed Virgin in which mass was celebrated; for on his coming to the See, as one of his first acts, he ordered a mass of the Blessed Virgin to be said every day at the *high* altar. The document remains in the Lib. Alb. All the Bitton's chantries were in this chapel, as were most of those of bishops Beckington and Bubwith. This lady chapel and the altar of St. Martin appear to have been under the charge of a prior, (Lib. Rub.) There are constant references in Lib. Alb. to this *chapel*, and I went into Miss Parfitt's garden to see if I could make it out; it is not very difficult to do so, on trying the ground.* The only other chantry to be noticed was one formerly of wood, dedicated originally to St. Edmund, built in its present form by Hugh Sugar, the executor of Bishop Beckington, identified by the tomb of Ralph

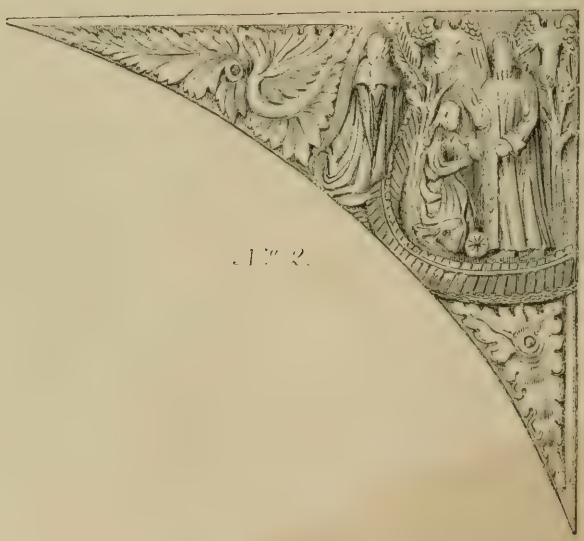
* This Lady Chapel was rebuilt by bishop Stillington, A. D. 1474, and pulled down afterwards by a Sir John Gates, who (Godwin says,) lost his head for his impiety.

Ergum in front of it, who gave largely to the chantry, founding the second morning and other masses at this altar of St. Edmund, which second morning mass was to be a mass of the Blessed Virgin. Hugh Sugar put the Virgin's flower-pot on some of the shields and perhaps re-dedicated it.*

A few words in conclusion—I am not one of those who whilst looking on the magnificent works—the memorials of the liberality of the good and great of former days—are disposed to lament over them, as over things past—never likely to be executed or equalled in these degenerated times. We have still "Bishops" and "Deans" and "Chapters" and "Archdeacons," who are willing to beautify palaces, raise up colleges, and restore cathedrals—still architects and workmen who can carry out their intentions—and I hope that before the works in the cathedral are finished, we shall find we have a sympathizing public who can value, and think it a privilege to aid them effectually in their undertakings.

*It seems hardly possible there should have been an altar of St. Edmund's in the time of bishop Robert, or he would have mentioned it in the document to which I have alluded, (at least) if it had to do with the dedication of any portion of the building; now the north porch was evidently dedicated to St. Edmund, (by the sculpture on its entrance,) and this appears to me a reason why the north porch could not have been built in bishop Robert's time.

N.° 1.



N.° 2.

Spandrils from the West Doorway of St. Mary's Church Taunton.

Scale one inch to a foot.

Sculptures on the West Doorway of St. Mary's Church, Taunton.

BY MR. C. E. GILES.

THE sculptures represented in the accompanying plate, decorate the western portal of the Church of St. Mary Magdalene, Taunton. And although the magnificent tower of which they form a portion, has been often described and is generally known, I am not aware that any allusion has been made to these interesting relics of medieval art.

The tower is built of two different kinds of stone; the dressings and portions of the ashler work being the inferior oolite from the celebrated quarries of Hamdon Hill, and the walls chiefly of a perishable stone of the red sand stone formation. Much of the Hamdon Hill stone used in the tower is inferior to that found in other churches of the neighbourhood. It has been suggested that the earlier workings of these quarries exhibited a harder and more durable material than for some centuries has been obtained. From some little acquaintance however with these quarries, I can vouch that stone of very good description is still available, but the

beds vary considerably, and require care in selection. Some little time ago this doorway was placed under my care for restoration; and it was while examining it, that my attention was drawn to the carvings filling the spandril. Thickly covered with coats of yellow ochre, they appeared at first sight to be of similar stone with the doorcase itself; but after carefully cleansing them they were found to be cut in slabs of a close grained freestone, let into the position which they occupied, and had evidently been originally coloured and gilded.

The dedication of the church led me to conclude that the subject of the sculpture No. 2, was our Saviour appearing to Mary Magdalene in the garden after his resurrection. There is a space fenced in, being a conventional way of representing a garden. The figure of our Lord, though much mutilated, is a very distinguishable type, and is dignified and expressive. He is raising his hand as Mary kneels before Him, and appears to be uttering the words, "Touch me not, &c." Mary seems to hold the spices in her hand. On the ground is a flower rudely carved, which I believe to be the sun flower, an emblem of faithfulness; there are two trees overshadowing the group, on which are angels with outstretched wings. Outside the paling is a kneeling figure vested in a cope, apparently some ecclesiastic.

The sculpture No. 1, I could not explain; but supposing the task might not be difficult to one well

acquainted with medieval legends, I transmitted a cast to Mr. Pugin, who kindly furnished me with a solution, most satisfactory to any person who takes the trouble to examine the original. Mr. Pugin says, that "it represents the miraculous vision of the resurrection of our Lord by St. Gregory, (or Pope Gregory the Great) when officiating at high mass." The details are clearly to be discerned; the altar with the niche containing the cruets, (the forms of the latter being most intelligible) the conventional tomb,—a stone sarcophagus with our Lord rising, and two angels with outspread wings removing the shroud. St. Gregory raising the consecrated wafer, stands on the steps of the altar, one acolyte supports the chasuble, another the taper; while two figures, apparently priests, are seated a little to the rear and at the side, one of them holding the triple crown of St. Gregory. Grotesque heads, with bold foliage, fill up the angles. A very peculiar and not very decent figure is supporting the altar. The features appear to have been systematically and wholly destroyed, but the drapery will be found to be very bold and effective. To my regret it was considered necessary to renovate these most interesting carvings, to correspond with the restored doorcase. Mr. Richardson (who restored the beautiful effigies of the Temple Church,) has added the new portions in mortar, in order that the original work might be altered as little as possible.

Glastonbury Abbey.

BY THE REV. F. WARRE.

IN attempting a sketch of the history of the Abbey of Glastonbury, I am well aware that I am undertaking a task, in which if successful there can be but little merit, while a failure will fairly expose me to blame, as deficient in research and careless in execution. All that is known of so celebrated an establishment,—the mitred Abbot of which was one of the first of a princely hierarchy both in place and power, and was inferior to few of England's nobles either in rank or influence; whose church was equal, if not superior, to any of our cathedrals both in size and beauty,—has of course often been laid before the public. I need only mention Warner's history of Glastonbury, to shew at once that in this paper there can be but little originality; it is merely a compilation from the works of authors whom every one may read for himself if he chooses; the only use it can possibly be is to save my audience trouble, though

many of you are probably better acquainted with both the history and remains of Glastonbury than myself. The best excuse for the undertaking is, that we are assembled at the place itself, and that there can hardly be a fitter subject for the attention of the Archaeological section of a Somersetshire Society, at their annual meeting, than the history and remains of one of the most noble relics of days gone by, to be found either in this or any other county. Without then any further preface beyond offering my thanks to my colleagues of the Archaeological section of the society, by whose kind assistance I have been enabled to produce this sketch, such as it is, I will at once proceed to give a brief abstract of the history of that magnificent establishment, the Abbey of Glastonbury, and a description of those venerable and beautiful remains which still bear witness *to its former* splendour.

To those who hope for salvation through faith in Jesus Christ, the circumstances attending the first introduction of that faith into these islands, cannot but be a subject of very great interest; but, unfortunately, on this point we have no surer guide than tradition. It is certain that the Gospel was preached in this country as early as the first century, and made such progress, that Lucius King of the Britons is said to have built a magnificent cathedral at Winchester about the middle of the second century. But of this very apocryphal potentate little or nothing is really known;

even the tomb which the vergers of former days used to point out as containing his remains, has been satisfactorily shewn to be that of Bishop Godfrey de Lacey, who presided over the diocese of Winchester during the latter part of the twelfth century; nor is it very evident, even if he ever existed, how a petty prince, ruling by permission of the Romans, could have been so great a man as he is represented to have been. But even supposing that he really did found a church at Winchester at the time he is said to have done so, still, Glastonbury has a prior claim to the honour of being the site of the first Christian Church in Britain; and that claim appears to be as well substantiated as one of such high antiquity can easily be.

It is said that about A.D. 63, Joseph of Arimathæa and Simon Zelotes were sent by St. Philip from Gaul into Britain, and having received permission from the British prince Arviragus, founded a christian church at Avalon or Glastonbury. Now without discussing the probability of the truth of this legend, which is so corrupted by the accompanying superstition of the miraculous thorn, as to be at least very doubtful, still, we know that some one did preach christianity in these islands about that time. Now it is an ascertained fact, that St. Paul was at Rome near about the same time as Caractacus, the king of the Silures, and it is stated that the release of the apostle and that of the British captive, took

place in the same year. The circumstances of the captivity and release of so remarkable a person as the British chieftain, were no doubt the topics of general conversation at Rome; and we can hardly doubt, but that the salvation of the western barbarians, must have been deeply interesting to the great apostle of the Gentiles, whose labours we know were extended to the extreme parts of the west. It is therefore at least as probable that St. Paul himself preached the gospel in this country as any other apostle; and the following circumstances render it not improbable, that he did in person preach the faith at Glastonbury, and founded there the earliest christian church which existed in these islands.

Setting aside the possibility of St. Paul's wishing to convert the subjects of Caractacus, which would certainly have induced him to land some where on the coast of the Bristol channel, we know that both before the invasion of the Romans and during their occupation of this country, a considerable trade was carried on between the inhabitants of Gaul and Britain, in the ores produced from the mines of the latter country; and that an emporium of no small importance existed at Uphill, the Roman Axium, at which place part of the produce of the mines of Mendip was shipped for exportation. This then was very likely to have been the landing place of any person coming from Gaul, particularly if we suppose him already interested in the Silures or in-

habitants of South Wales; and when once landed, it was not likely that so zealous an apostle as St. Paul, should have neglected to offer the tidings of salvation to the people of the country, the traces of whose habitations may yet be seen at Bleadon, in the immediate vicinity of Uphill, and on Worle hill, at a very short distance from it.

It must be remembered that at the time of which we are speaking, the low ground at the mouth of the Uxella or Parret, as well as that between the coast and Glastonbury, was, if not actually covered by the sea,* at least a morass unfit for human residences; and that after leaving the coast, Avalon or the passage town on the water, called otherwise *Inis-witrym*, from the glassy water upon the banks of which it stood, was probably the first town of any size at which he arrived; and if he found the local magistrates, whether Arviragus or any other person, disposed to give him permission, what can be more likely than that he would there establish a church among the converts he had made, and that a building would be consecrated there, for the services of that religion which he had introduced. Whether this building stood on the site of the present abbey, or, as is generally supposed, on Weary-all hill, it is impossible to discover; no doubt it was small and humble, and built, like other British houses, of wood; but it was the first Christian Church that stood in Britain, and perhaps sanctified by the consecration

* See Mr. Stradling's paper, *supra*. page 48.

of St. Paul himself; and if so, how much more noble than the splendid fabric which the christians of after days raised in its vicinity, the ruins of which, even in their present state, declare how magnificent was the piety of our ancestors.

However this may be, whether Glastonbury was honoured by the presence of the great Apostle of the Gentiles or no, certain it is, that christianity was introduced into this country at a very early period, and took firm and abiding root here. As early as A.D. 314, British bishops took part in the Council of Arles, and the flourishing state of religion in these islands is mentioned by many of the primitive christian writers. During the first three centuries our holy faith was of course exposed to the same fiery trial in this island, as in the rest of the christian world; but it is probable that Avalon, as it had received the word gladly, still held it firmly; for in the fifth century, at no long interval from the first introduction of monachism into Britain by the Welshman Morgan, better known by the name of Pelagius,—we find the historian Gildas, driven from his retreat on the Holmes by the terrors of northern piracy, taking refuge at Glastonbury, and there ending, we will hope in peace, a life which the calamities of his country, the sins of her rulers, and the dangers of the church, appear to have combined to render miserable. Here too, about A. D. 533, St. Patrick, the apostle of Ireland, is said to have retired, together with a

number of his Irish disciples, and to have established a rule of discipline for the community which he found here, over which he presided till his decease, for about thirty years after; which rule having been improved and completed by his successor, St. Benignus or Benedict, continued to be observed by the monks of Glastonbury, till St. Augustin exchanged it for the Augustin formulary A. D. 605.

Paulinus, bishop of Rochester, and St. David, bishop of Menevia, are mentioned, as having been great benefactors to the abbey: and the fact of its having been chosen as the burial place of king Arthur, is alone sufficient to shew, that in the middle of the sixth century, it had attained to a very high degree of importance and reputed sanctity. The history of this christian prince and gallant warrior, is involved in mystery, and has been so overlaid by the romantic fables fashionable in the 13th and 14th centuries, that his very existence has been doubted. He has been supposed by some, to have been merely a personification of the desperate contest, which raged through nearly the whole of the 5th and 6th centuries, between the christian inhabitants of Britain and the pagan invaders, known in history by the generic name of Saxons; or else to have been a mere mythical hero, whose mighty actions are no more worthy of a place in history, than the expedition of Jason, or the labours of Hercules. But if the antiquaries of former days were justly accused of "admiring the inscription, doating on

the dust," I cannot help thinking that those of the present day are in some danger of doubting the existence of the inscription, because in the course of twelve or thirteen hundred years, some dust has collected upon it; and it appears to me that they will be more likely to arrive at the real meaning of the letters by carefully removing as much of the dust as they can, than by refraining to look at it all. This is the course which has been pursued by the learned historian of the Anglo Saxons, Mr. Sharon Turner, who has shewn in the treatise appended to his valuable history, that in the writings of the Welsh bards, some of whom were probably actually contemporaries of king Arthur, he is represented as a very different person from the fabulous hero of the Morte d'Arthur,—not as a knight errant following the guest of the holy Sangreal,—nor, "girt with British and Armoric knights," holding high festivals of the round table at Caerleon or Camalet, and, in a manner somewhat inconsistent with his character as the champion of Christendom, receiving aid from the mighty enchanter, Merlin; but simply as a gallant prince and warrior, striving to the death against the Saxons, at once the ruthless invaders of his country, and the bloody persecutors of his faith.

Nor is there really the smallest improbability in his being buried at Glastonbury; for if he died on the banks of the river Camal,—and that a desperate and prolonged contest did take place

in that part of Cornwall, in very early times, is evident from the military works which still exist there,—what could be more likely, than that the great champion of christianity should be brought to the great christian church at Glastonbury, and there interred among the first preachers of that religion, in defence of which he had fought so gallantly? The legend, that his famous sword, Excalibur, was received by an arm that rose out of the river, and that he himself was carried by Morgana, or the Lady of the Lake, or water, to Avalon, if translated into simple prose, may mean no more than this,—that the great warrior Arthur being killed in battle at Camelford, was embarked on the river, and transported to Glastonbury by sea, instead of being carried by land through Devonshire, and the western part of Somerset, at that time occupied by the hostile Saxons. Of the discovery and exhumation of his remains, in the reign of Henry II, Camden, on the authority of Giraldus Cambrensis, who professes to have been an eye witness of what he describes, gives the following account. "When Henry the second, king of England, took knowledge out of the songs of British bards or rythmers, how Arthur, that most noble worthy of the Britons, who by his martial power had many a time daunted the fury of the English Saxons, lay buried here, between two pyramids or sharp headed pillars,—he caused the body to be searched for; and scarcely had they digged seven foot deep into

the earth, but they alighted upon a tomb or grave stone, on the upper face whereof was fastened a broad crosse of lead, grossly wrought, which, being taken forth, shewed an inscription of letters; and under the said stone, almost nine foot deeper, was found a sepulchre of oak, made hollow, wherein the bones of that famous Arthur were bestowed; which inscription or epitaph, as it was sometimes exemplified and drawn out of the first copie in the abbey of Glastonbury, I thought good for the antiquity of the character, here to put down. The letters being made after a barbarous manner, and resembling the Gothish character, betray plainly the barbarism of that age, when ignorance, as it were by a fatal destiny, bare such sway, that there was none to be found, by whose writings the renown of Arthur might be blazed and commended to posterity; a matter and argument doubtless meet to have been handled by the skill and eloquence of some right learned man, who in celebrating the praises of so great a Prince, might have won due commendation also for his own wit; for the most valiant champion of the British empire seemeth even in this behalf only most unfortunate, that he never met such a trumpeter, as might worthily have sounded out the praise of his valour, but behold the said crosse and the epitaph therein."

Now this description, the truth of which has often been called in question, though why it should

have been so, is not very evident, except that those who deny his existence might be rather puzzled to account for the discovery of his tomb,—contains a piece of internal evidence, which appears to me strongly to vindicate the veracity of the narrator. In the time of Henry II, the usual way of interring persons of importance, was to enclose the body in a stone coffin, and it seems probable that if Giraldus had invented the story, he would have represented the hero as buried in a coffin of that material; but he distinctly says, "a sepulchre of oak made hollow," not simply an oak coffin; and we can hardly suppose that, unless he had seen it, he would have described a mode of interment which modern research has proved to have been sometimes used among the Celtic tribes cognate with those of Britain, with whose customs Giraldus was most likely totally unacquainted. If my hearers should be inclined to smile at my credulity, I can only plead that it is very harmless, for it can hardly make a man a worse christian to believe that St. Paul preached in his native land, or less devoted to his country, to believe that Arthur was buried in his own county. At all events, I do not envy that man, who would not run the risk of believing a little more than the truth, rather than lose, through too much caution, the pleasure of receiving as facts, many of the most heart-stirring events recorded in history.

But however celebrated the Abbey of Glastonbury had by this time become, the names of only three

abbots of British race after St. Benignus, have come down to us,—Wongret, to whom the king of Devonshire is said to have granted lands in *Inis-witrym*, Salemund, and Bregoret. But no sooner were the Saxon pagans converted to christianity, than their piety and repentance shewed itself in liberal gifts to the church. St. Paulinus, the first Saxon Archbishop of York, about A. D. 630, besides other benefactions, rebuilt the whole church with timber, and covered it with lead; Kenwalch, Kentwine, and Baldred, granted lands to the abbey, among which the manor of Pennard was given to the abbot by the last mentioned monarch. But of all the West Saxon kings, Ina appears to have been the most munificent benefactor to the church of Glastonbury. In the year 708, he pulled down the old buildings of the monastery, and re-built them in the most sumptuous manner; the church he caused to be re-consecrated, and dedicated to God, in honour of Christ and the apostles St. Peter and St. Paul; and besides plate, jewels, and vestments of enormous value, he bestowed upon the abbey the manors of Brent, Doulting, Pilton, and Sowy, and exempted from episcopal authority, the churches of Glastonbury, Sowy, Brent, Moorlinch, Shapwick, Street, Butleigh, and Pilton. But this well intentioned, though really unjustifiable usurpation of the episcopal rights, was, like all other exertions of zeal not according to knowledge, the source of great mischief; the independence of these churches being the subject of

controversy between the monks and the bishops of the diocese, for upwards of 400 years.

From this time the abbey appears to have increased in splendor and wealth, receiving from time to time munificent benefactions both from royal and private piety, until the incursions of the northern pirates spread distress and poverty through the whole island. Of this suffering, Glastonbury appears to have undergone its full share, for in the reign of Edmund, the abbey had so fallen from its ancient splendor, that that monarch thought fit to appoint the celebrated St. Dunstan to restore it to its former magnificence, and granted him the free use of the royal treasures for that purpose. In the year 942, the new foundation was laid, and in 944, a charter was granted to Dunstan and the Benedictine monks, whom he had introduced, confirming all former grants, increasing their privileges and powers, and empowering them to hold their lands, as free from all claims, as the king held his own. Though after the death of Edmund, who was buried in the church of Glastonbury, St. Dunstan was banished, and deprived of his abbey by Edwy, the bounty of the Saxon and Danish monarchs still enriched Glastonbury with a profusion of wealth; Edwy, Edgar, and Edmund II, vied with each other in liberality to the church; and Canute not only granted a charter in favor of the abbey, but also gave it this remarkable privilege, that no subject should enter the Glaston twelve hides, without leave or permission

of the Lord Abbot. The last Saxon abbot, Ailnoth, or Eglenoth, being one of the principal men in the nation at the time of the Norman conquest, was deposed A. D. 1077, and carried by the conqueror into Normandy. At this time the wealth and power of the abbot of Glastonbury were enormous; a mere list of his numerous manors, if read here, would tax your patience to no small extent. His privileges and immunities, derived from royal charters, were such as perhaps no other subject has ever enjoyed. He was exempted from episcopal jurisdiction,—held his lands as free as the king held his own,—no subject could enter his district without his permission, and he was first in rank among the abbots of England, that dignity having belonged to Glastonbury until it was transferred to St. Albans by Pope Adrian A.D. 1154.

The fatal event of the battle of Hastings, and the accession of the Norman conqueror to the throne of England, which exerted so disastrous an influence upon the freedom and fortunes of the Saxon inhabitants of this country, appear to have been severely felt by the church of Glastonbury. The list of its manors soon after the conquest, shews a lamentable deficiency; nor was the diminution of their property the greatest evil which befel the monks in consequence. In place of the Saxon abbot, Ailnoth, Thurstin, a rapacious Norman, was forced upon them by the conqueror, who squandered and alienated their possessions, and

tyrannized over them with such cruelty, that at length the sturdy spirit of the Saxon monks was roused to resistance; and on their refusal to submit to his authority, the abbot expelled them from the chapter house, by the assistance of a body of Norman soldiers, who followed them into the church, where a desperate contest took place, in which two monks were killed, and fourteen wounded, in spite of the sanctity of the place. So great however was the scandal which arose from this unhappy affray, that William, though certainly not usually favourable to his Saxon subjects, removed Thurstin from the abbey and banished him to Caen, of which he had been a monk previously to his appointment to the abbey of Glastonbury, and restored to the monks several manors, which he had alienated from them. William Rufus, however, bribed by a gift of 500lbs. of silver, replaced this rapacious dignitary; but such was the determination of the monks, that they again resisted his introduction of some novelty in their church music; the church was again polluted with slaughter, nor was the mutiny quelled till three monks had been slain, and eighteen wounded, by the Norman soldiery, whom the abbot had again called to his aid. Many left the monastery, nor did the whole number return till after his death, when, under the prudent and just rule of his successor, Herlewyn, the abbey began to recover from the ill effects of Thurstin's rapacity and tyranny.

Herlewyn, who seems to have devoted himself to the good of the community over which he presided, laid the foundation of a new church, which was completed by the munificent exertions of Henry de Blois, brother to king Stephen, to whose proficiency in architectural science, the churches of St. Cross, Romsey, and others, still bear witness; but his church at Glastonbury, with the exception of the tower, was, together with the greater part of the monastery, destroyed by fire A.D. 1185, only fourteen years after his death. The munificence of Henry II, and the exertion of the monks, however, shortly repaired this misfortune; the king immediately sent his chamberlain, Ralph Fitz-Stephen, to examine the ruins, and to take the necessary steps for re-building the church and monastery; and so expeditiously and well was this done, that though the work which had been stopped at the death of Henry, was not completed till A.D. 1193, 5. Richard I, the new church of St. Mary was dedicated by Reginald, Bishop of Bath, on the feast of St. Barnabas, A.D. 1186.

The next event worthy of notice, which is to be found in Dugdale, is the investment of the abbot, Henry de Soliaco, or De Swansey, about the year 1189, with the privilege of using the mitre, ring, gloves, dalmatic, tunic, and sandals, and of blessing the sacerdotal vestments, which he obtained from Pope Celestine; but upon the elevation of this

abbot to the see of Worcester, an event took place which highly exasperated the feud, which had existed with more or less violence between the abbey and the bishops of the diocese, ever since the unfortunate exemption from episcopal jurisdiction, granted by Ina to Glastonbury, and some other churches subject to that abbey.

It was one of the conditions of the release of Richard I from captivity, that Savaricus, a kinsman of the Emperor, should be made Bishop of Wells, and should hold Glastonbury together with that see. Having been consecrated, he immediately assumed the title of Bishop of Glastonbury. The monks, highly resenting this infringement of their privileges, in the year 1199 elected William Pyke as their abbot. Pyke however was excommunicated, and several monks committed to prison. Pyke then repaired to Rome, where he died suddenly, not without suspicion of having been poisoned; and the commissioners appointed by the Pope, awarded to the bishop no less than eleven manors, as his share of the property belonging to the abbey. Nor did the effects of this iniquitous proceeding terminate at the death of Savaricus, which took place soon after; for these manors were claimed by bishop Jocelyn; who succeeded him in the see of Wells; nor was it till A.D. 1218, that the monks regained their ancient privilege, at the price of the manors of Winscombe, Pucklechurch, Blackford, and Cranmore, (with the right of presentation to

their churches,) which were assigned by the commissioners appointed by the Pope, to the bishop of Wells and his successors in the see for ever.

In the year 1295, St. Michael's chapel on the Tor hill was thrown down by an earthquake. Three years afterwards, King Edward I and his queen, visited Glastonbury, and the bones of Arthur were again exhumed. From this time to the reign of Henry VIII, the fraternity of Glastonbury seems to have flourished under the rule of many excellent abbots, among whom John De Taunton, John Kent, Geoffry Fromond, Walter De Taunton, John Bremton, Walter De Monnington, John Chinnock, John Selwood, (at whose death, a dispute arose between the monks and the bishop, as to the right of nomination of the abbot,) and Richard Beere may be mentioned as benefactors,—standing high in the favour of kings, nobles, and people, and being an object of peculiar reverence to all classes. Even the disastrous wars of the roses do not appear to have impoverished or injured this splendid establishment, to any great amount; for at the reformation we find that its revenues were valued at £3508 13s 6¾d, exclusive of plate, jewels, and vestments of enormous value.

Richard Whiting, that high spirited and conscientious abbot, who to the last defended the trust reposed in him by the church, equally against the threats of Henry, and the temptations held out by that monarch, was indeed placed

in an exalted post. A mitred abbot, a peer of parliament, lord of wealth which in those days was really enormous, exercising a princely hospitality, and breeding up in religious learning at least 300 sons of noblemen and gentlemen; his personal character such as to double the influence accruing from his elevated rank,—it might have seemed that he was beyond the reach of misfortune; but the ire, —I should rather say the lust and avarice—of a despotic king, "rode forth upon destruction's wing." Arrested at his country residence at Sharpham, he was hurried to Wells, there subjected to the mockery of a trial on the absurd charge of embezzling the plate of the monastery, and though, as it is stated, acquitted of the charge, he was murdered,—for I will not call it executed,—on the Challice hill, which overlooks the buildings of that splendid establishment, which he had governed so well. The monks were dispersed, the manors granted to rapacious courtiers, and of all the noble buildings which then composed the Abbey of Glastonbury, none are now left standing, but those mutilated, though still beautiful fragments, which I will now proceed to describe.

ARCHITECTURAL DESCRIPTION.

With the exception of the beautiful ruins of that hallowed edifice, which we now look upon, little remains of the great abbey of Glastonbury; for of all the domestic buildings, necessarily attached to so vast an establishment, all have disappeared, but the very remarkable kitchen, the porter's lodge,

and the abbey barn. Of the church, we can still trace the vestiges of St. Joseph's chapel, the choir, transept and nave, and the curious building which connected St. Joseph's chapel with the body of the church, commonly known as the ante-chapel; of these the most ancient is St. Joseph's chapel, and with the description of that building it will perhaps be best to begin.—This chapel, which is a beautiful specimen of very late Norman or transition work, is a parallelogram, measuring from east to west about sixty six feet, and from north to south thirty six. Its north side is divided into four bays by buttresses without stages, projecting about two feet from the face of the wall, having shafts at the angles, with early English bases and capitals, but with the square abacus, rising from a base, consisting of a plain slope and late Norman or early English surbase, and finishing with a peculiarly elegant termination. The lower compartment of each bay, is enriched with an intersecting arcade, the shafts of which are divided at about half their height by a bead slightly undercut; the arches are enriched with a moulding in some degree approaching to the toothed ornament, perhaps a transition from the zig-zag. Above this arcade, is a very bold string course of transition character, which supports a window, the head of which is semicircular, deeply set in the wall, the arch being of two orders, with shafts in the angles, having transition capitals with the square abacus, supporting varied mouldings

of late Norman character; the angle of each order is moulded into a bold three quarter round, and over each is a plain dripstone, supported by corbel heads. The entrance on this side, was by a most elaborate door-way, in the second bay from the west, occupying the whole space between the buttresses, the arch being enriched with four series of medallions, exhibiting many curious varieties of costume; the second and fourth series are supported by shafts having early English bases and capitals, with the square abacus; the first and third are continued to the level of the bases, where they terminate in a plain square, rising from a simple chamfer of the same shape. Over the door-way is a pediment formed of two bold rounds of different sizes, divided by a hollow. At each corner of the chapel stands a turret, which is little more than an enlarged buttress, having shafts at the angles, supporting at the level of the cornice, a bold string course, above which is an intersecting arcade, the shafts of which have no abacus. The turrets are covered with a pyramidal roof of ashler work, the cornice moulding of which is very rich; the upper compartment of each turret is pierced, on the east and west sides, with openings of a form common in early English and decorated buildings.

The west front is of similar character to the north side, the arcade filling up the space between the turrets (of which that at the south-west angle is in a state of total ruin,) and supporting a triplet of

semi-circular headed lights, of great beauty, the two side lights of which have been filled up with tracery of a much later date. The south side is similar to the north, but the entrance is less elaborate; a door of much later date has been opened in the south-eastern bay of the chapel. The basement of the interior is occupied, as externally, by an intersecting arcade, the vaulting springing from large shafts between each bay, at the level of the string course under the windows, which appear to have been filled with tracery of a later date. Each compartment of the arcade has been painted; the design of the decoration, as far as can be seen, was a trefoiled arch, in the spandrils of which are depicted a crescent and an estoile, or it may be a a sun. This symbol is a very ancient one of the Messiah and the blessed Virgin; but it also occurs in some of the coins of the Plantaganet kings of England, and may perhaps refer to their visits to Glastonbury; it has also, when combined with the square, a masonic meaning, which I am not at liberty to divulge.—Under the chapel is a crypt which extends also under part of the ante-chapel. Immediately to the west of the south-eastern turret, is a door-way of later character than the rest of the crypt, leading to a very curious well, surmounted by a low semi-circular arch. There was also an external entrance, communicating with this well by a flight of steps. This chapel from the style of its architecture, which is Norman, of so late a

date as to be fairly called transitional, I conceive to have been built by Henry de Blois, about A.D. 1136, and to have been originally detached from the church,—my reasons for which supposition I will give afterwards.

The part of the ruins to be now mentioned, as being next in antiquity to St. Joseph's chapel, is the church itself. This magnificent building consisted of a choir or presbytery, (which in a conventual church was in fact the chancel,) tower, transepts and nave; the choir as well as the nave having north and south aisles. Of the nave nothing now remains but three bays on the south side, the chief peculiarity of which is, that the windows, which, unlike those of St. Joseph's chapel, have externally pointed arches, are internally semicircular, with mouldings of Norman character, having shafts at the angles, with the square abacus, while those of the vaulting shafts are octagonal. The length of the nave from the steps, descending from the transepts, is about 185 feet, and the breadth about 96; on the south side of the nave, were situated the cloisters, of which nothing now remains.—Of the transepts little can be traced, beyond the remains of two small chapels on the north and south sides, and the majestic tower piers, two of which still remain, together with enough of one arch, to give us some idea of what the splendour of the church, when entire, must have been. On the eastern side of these piers may be seen the

remains of panel work of much later date, probably the remains of a clerestory. The north side of the presbytery is nearly gone, but of the south, seven bays still remain, differing from those in the nave, the windows having pointed arches both externally and internally. The last two bays to the east, present a very different arrangement both of mouldings and plans from the others, and may perhaps have been the Lady Chapel, which was not invariably at at the east end of the building; particularly as the ground rises immediately to the east of the presbytery, hardly affording room for the foundations of any building larger than a small apsis, with which the east end perhaps terminated, as is the case with many churches of about the same date, as Easton, near Winchester, built by Henry de Blois, and Tidmarsh, in Berkshire, which is an early English building of rather later date than this part of Glastonbury. Abbot Walter de Monnington is said to have added two arches to the presbytery about A.D. 1374; but if these two bays are his work, they are a wonderfully successful imitation of an earlier style than that which prevailed in his time. The whole of this vast edifice, though very similar both in ornament and style to St. Joseph's chapel, is of rather later date, and no doubt the work of Fitz-Stephen, who was sent down by king Henry II to superintend the rebuilding of the church, after the conflagration, which had, with the exception of the tower, destroyed the whole church erected by

Henry de Blois. From the east end of the presbytery to the steps descending to the nave, is about 184 feet, and the breadth, including the aisles, about 68. In this part of the church are three stone coffins, one of which is calculated to hold a corpse 9 feet 6 inches in length; but this probably included the peaked bacinet, common in the fourteenth century.

The latest portion of the church now standing is that which is commonly called the antechapel; it is of early English character, and probably not very early in the style; it appears to have contained a flight of steps, descending from the great west entrance to the nave, which was through an arch pointed above and having under it another of a segmental form, of almost, if not quite, decorated character, to the level of St. Joseph's chapel, at the foot of which was a doorway on the north side. The construction of the buttresses is very peculiar, and the interior arcade, though no doubt adapted to that of St. Joseph's chapel, consists of trefoiled arches; the windows also are large and pointed, and on the under part of the arch where it joins St. Joseph's chapel, may be seen a panelled ornament of a different character from any other part of the building. The rebuilding of the church, which had been stopped towards the end of the reign of King Henry II, was not completed till A.D. 1193, 5 Richard I, but whether this part of the building be of a

date sufficiently early to have been finished at that time, I will not venture to decide. From the top of the stairs to the east end of St. Joseph's chapel is about 40 feet, and the breadth of the ante-chapel 28 feet. The whole length of the church externally, from the east end of the presbytery to the west end of St. Joseph's chapel, is about 510 feet.

My reasons for supposing that St. Joseph's chapel was originally a separate building from the great church, are these,—first it is in itself a complete and beautifully proportioned building, having at its eastern angles, turrets similar to those which form its western termination; which would hardly have been the case, had it been originally intended to be merely a continuation of a larger edifice. Secondly, the arch connecting it with the ante-chapel, is manifestly of later date than the chapel itself; from which it would seem probable, that the original eastern termination has been pulled down. But what appears to me to be almost conclusive is this, —the style of architecture in which it is built can hardly be later than the time of Henry de Blois, who, we know, not only built the great church and many domestic offices in the abbey, but also completed the work of abbot Herlewyn. But we are told that the whole church built by Henry de Blois, with the exception of the tower, was destroyed by fire A.D. 1185. Now if St. Joseph's chapel be of earlier date than this, (which it certainly appears

to be,) had it been at that time connected, as at present, with the great church, its preservation from that catastrophe would be irreconcilable with the statement above made; but if we suppose, that until the erection of the ante-chapel in the 13th century, it was a distinct and separate building, the difficulty disappears; for though we are told that a great part of the abbey, as well as the church, was destroyed by the conflagration, I have no where found it stated that the chapel dedicated to St. Joseph of Arimathæa, which certainly existed from very early times, was included in the destruction.

Of the domestic buildings of the abbey nothing remains but the great kitchen, the porter's lodge, and the abbey barn, all three of much later date than the church. It is said that the kitchen was built by Richard Whiting, the last abbot of Glastonbury, in the reign of king Henry VIII; but this can hardly be the case, for (setting aside the improbability of such a man as Richard Whiting expending the wealth of his abbey upon a magnificent kitchen, at a time when he must have known that destruction was hanging over the whole establishment,) the style and details of the building seem rather to indicate the end of the 14th and the beginning of the 15th centuries, as the date of its erection; and it seems probable that it is the work of abbot Breynton, who, amongst other domestic buildings, is said to have built a kitchen some time in the latter part of the 14th century.

This is all that is left of the great abbey of Glastonbury, the first christian church which existed in these islands. Is not the sight of these mouldering ruins, enough to fill us with apprehension lest the warning of the poet—

> "Delicta majorum immeritus lues,
> Romane, donec templa refeceris,"

may be truly applicable to ourselves?—at least we ought to contemplate them with awe and sorrow; for albeit the Most High dwelleth not in temples made with hands, this mighty temple was raised to His service by the efforts of zeal, which, in one point, was surely according to knowledge; in that it expended to His honour and glory, that wealth, which we in our days are too apt to waste in personal luxury, or to lavish in vainglorious ostentation.

Old Door-way at Frome.

BY MR. C. E. GILES.

THIS highly picturesque doorway, represented in the accompanying plate, until last year stood in that portion of the town of Frome, called Lower Keyford. It formed a portion of the remains of some buildings which evidently had once been extensive, but whose history seems to be involved in much obscurity. Aldhelm, bishop of Sherborne and kinsman to Ina, king of the West Saxons, founded a monastery at Frome about A.D. 705, to the honour of St. John the Baptist; and common tradition points to these ruins as the remains. But in the absence of any clear testimony, this appears to me very doubtful; for a monastery situated so far from the town, could hardly have been said to have been founded in Frome; Keyford being spoken of much later as a separate village, and even at this day lying on the outskirts. Having been but imperfectly acquainted with the ruins, I am unable to speak very decidedly, but am inclined to believe that they possessed none of the features characteristic of a religious house. The

OLD DOORWAY AT LOWER KEYFORD FROME.

date of this doorway is pretty evident from its architectural details, which are late third-pointed or perpendicular, and cannot be earlier than the close of the 15th century. It bears all the characters of the principal entrance to a manor house of that period.

Now the manor of "Cayford" is repeatedly alluded to in various records, and among the Parliamentary Rolls of Edward IV is a curious petition from the family of a lady of distinction, "Ankerette, late the wife of William Twynyho, of Cayford, in the county of Somerset," addressed to the "Communes in the present parliament assembled," praying them to repeal and annul a certain indictment and judgment, whereby the said lady Ankerette had been condemned and executed at Warwick, having been previously dragged from her manor house at "Cayford," at mid-day, by certain followers of the Duke of Clarence, and conveyed to Warwick, where she was charged with having administered poison to Isabel, Duchess of Clarence, while being in attendance on the Duchess at Warwick.

The petition is set forth at length in Collinson's History of Somerset, and is very interesting. This attack on the manor house at "Cayford," took place in the 17th Edward IV, A.D. 1478:—and I cannot help thinking, in the absence of all testimony, that there could not have been two houses of great size, in the village of Kayford at that time; and if, as I believe, it was not a religious house at all, the in-

ference would be that this was the house of the "Lady Ankerette," and that in all probability the gateway was built by her. It is with much regret I must add, that these ruins have been lately destroyed, for what cause I know not; but surely some plan might have been devised for preserving a relic of ancient art, interesting alike for its intrinsic merit, and for the obscurity of its history.

Since writing the above I have looked for mention of any religious house here, in "Dugdale's Monasticon Anglicanum," and find the following note quoted from Tanner's Somerset, xxi. It will be seen that it confirms my own suspicions.

"Mr. Strachey mentions a priory and cell of nuns on St. Catharine's hill, and a nunnery belonging to Cirencester, at Cayford, in Frome; but I have met with no charters or records relating to them, and therefore suspect them to be traditionary stories only."

Nunney Castle.

BY MR. C. E. GILES.

THERE are numerous very valuable remains of the domestic architecture of our ancestors in this county, but by far the greater portion dates from the 15th century: the noble ruin of Nunney is one of the few exceptions, by its stern and simple grandeur at once proclaiming itself the work of the Plantagenet era.

The ruins of the castles of England and Wales are chiefly those of buildings which were at one time very extensive,—the residences of the Howards, Percys, Nevilles, and other great feudal lords; but Nunney castle seems to have been the residence of a knight or gentleman. It is stated to have been begun by Sir Elias Delamere, son of Sir J. Delamere, lord of the manor, late in the reign of Edward I, and finished by his grand nephews, John and Jaques Delamere, in the reign of Richard II, who are said to have embellished it with spoils won in the French wars. The building will, I believe, confirm

this statement. The account of it given by Leland in the time of Henry VIII, and quoted by Collinson, affords a complete description of it, when in a perfect state. Leland in the reign of Henry VIII, writes as follows:—"There is a praty castell at the west ende of the parish church, havynge at eche ende by the northe and southe two praty round towers gatheryd by compace to joyne into one. The walls be very stronge and thykke, the stayres narrow, the lodginge within somewhat darke. It standeth on the left risse of the river, [which] dividethe it from the church yarde. The castell is motyd about, and this mote is served by the water conveyed into it oute of the river. There is a stronge waulle without the mote rounde about, savinge at the este part of the castell, where it is defended by the broke."

The engraving will convey a just idea of the exterior as it is at present; the strong wall without the moat exists no longer; the moat is choked with weeds and rubbish, and the walls are shattered and breached.

The interior has suffered more than the exterior; all the floors have been destroyed, and it is rather difficult to say what the original arrangement was. The kitchen was evidently on the ground floor, with probably all the other domestic offices, and perhaps accommodation for men and horses. The hall seems to have occupied the centre portion of the building on the first floor; it was apparently of considerable size, extending the whole width of

Hunney Castle, Somerset.

the castle, and being lighted by four large windows, which however cannot be earlier than the reign of Richard II. In the south-east tower on the second floor, there is a very perfect example of a domestic chapel of the period; the entrance door is on the western side, opening in a very picturesque and curious manner through the jamb of a deeply recessed window; an arrangement apparently designed to secure the proper orientation of the chapel, which could only be effected by these means. The other window opens eastward; its sill, bracketted out, forms the altar, and is still remaining; a piscina also remains. The difficulty of access at such a height from the ground has prevented this almost unique chapel, as well as other interesting portions of the castle from being properly investigated. It would be certain to repay amply the little time and trouble necessary for a full examination. The turrets were probably covered with conical roofs, and the machicolations are very bold and elegant; the height of the walls to the turrets is 63 feet.

In the civil war it was garrisoned for king Charles I, and had in it a large magazine. Colonel Rainsborough, with his own and colonel Hammond's regiments and two pieces of ordnance, was sent by general Fairfax to take it. On August the 20th, 1645, (on September 8th, according to Collinson) it surrendered on condition of the garrison returning to their homes. It was burnt to prevent its being of any further use to the king.

The effects of the siege are still visible in the shattered walls.

During the siege, the garrison, to delude the besiegers, caused a young porking pig they chanced to have in the castle, to be conveyed into one of the back towers, where its cries could be distinctly heard, and there, pulling him violently by the ears and tail, would have it believed that every day at ten in the forenoon they killed a swine for their fresh provisions.—Unfortunately a deserter from the castle turned the joke against the garrison.

The besiegers having procured a gun (a thirty-six pounder) from Shepton Mallet, battered the thin part of the wall, (probably shewn them by the same deserter) where the staircase led to the upper apartments; and having made a breach, still visible, the garrison were so intimidated that they surrendered. The number of the garrison is stated by some to have been fourteen, by others twenty-four.

Seven of the enemy were killed, and mostly by one marksman, who, watching his opportunity from the turrets, seldom failed to strike his man. The besieged lost none but the above mentioned deserter. One of the besiegers, in contempt of the small garrison, had the audacity to climb a fruit tree in a garden where the manor mansion now stands, to steal the fruit. It was so near the castle that he was brought down by the first shot from the watchful marksman on the walls.

Geology of Somerset.

BY MR. W. BAKER.

I COME before you as one of the representatives of the natural history department of this society, to offer a few observations on the most striking geological features of our highly interesting field of research,—the beautiful county of Somerset.

The course which I have laid out for myself is, to pass from the oldest formation, in the order of geological time, to our rich alluvial lands, which are now in a state of accumulation; and to offer a few brief remarks on the features of the principal formations, merely to open the way for future papers of detail, on the numerous interesting portions of the province, which we now call our own.

More than thirty years ago, a young member of our very oldest geological family,—syenite—was observed at Hestercombe, one of the extended branches of the Quantock-hills, and the fact recorded in the transactions of the London Geological

Society, by Leonard Horner, Esq. late president of that society.—This discovery indicates that granite may be found in other parts of our western district.

The Quantocks, and the hills farther west, are the transition, or grauwacke, formation, and are of the lowest sedimentary deposits.

Few or no organic remains have been found in the grauwacke of Somerset, but some are known in the same class of rocks in Devon and Cornwall. In our hills, however, we have numerous beds of limestone, rich in madrepores, corals and encrinites. This limestone is much quarried for manure in several places. Weather-worn, or polished specimens, are interesting for geological cabinets. They are richly colored,—yellow, red, brown, pearl-grey, and almost black. Copper has been obtained in considerable quantities in the Quantocks, but not sufficient to pay for working. Mining operations have been carried on at Broomfield and Doddington. At Broomfield, the ore has been obtained as a rich yellow sulphuret, associated with quartz and grauwacke; and at Doddington, as green and purple malachite in coraline lime-stone. Rich and beautiful specimens of these ores are to be seen in the cases in the society's rooms at Taunton. Iron ore is found in those hills, but more abundantly in the western hills.

It is probable that in former times, perhaps as long ago as when the Romans exercised military sway in this country, and improved the knowledge

of our forefathers in many of the arts of life,—iron was smelted on our western hills; for charcoal scoriæ, and fragments of crucibles, mixed with iron ore, are found in the Brendon hills. The almost insulated Cannington park is marked in the Ordnance map as one of the subordinate limestone beds of the Quantock hills, although so far removed from them. Mr. Horner in his geological survey of the western part of Somerset, says "Cannington park is composed of a highly crystalline limestone of a pearl grey color, having a very close grain. I examined it with very great care, in order to discover whether it contained any organic remains, but I could not find the slightest trace." * * *

"It is very probable that by a more minute examination, madrepores and shells may be found in this limestone; for it certainly has very much the appearance of what is called transition limestone."—We now know that corals and encrinites are readily found there.

The beautifully wooded and watered combes of the grauwacke hills are widely known, and so are their lofty eminences* which command extensive and magnificent prospects.

*Dunkery Beacon	1697 feet.
Haddon Hill, (near Dulverton) ...	1140
Culbone Hill, (Porlock)	1211
Grabbist, (Dunster)	906
North Hill, (Minehead)	1059
Willsneck, (Quantock)	1270
Douseborough ,, ...	1022
Cothelstone ,, ...	1066

The Mendip Hills, extending from the neighbourhood of Frome to the Bristol channel, come next in geological age. The prevailing rock is carboniferous or mountain limestone, resting on the old red sand stone, which protrudes through the limestone at some of the highest parts of the district. Various conglomerates and sandstones make up large portions of this series of rocks. The limestone contains numerous species of molluscous shells, besides corals and encrinites.—These hills have undergone mighty disturbances, as is exemplified in the stupendous Cheddar cliffs, and in the romantic Brockley, Goblin, Burrington and other combes.

The insulated rocks, Steep Holmes and Flat Holmes, seem to have been broken off from the limestone hills of the Mendip district, and the corresponding carboniferous strata of Wales, at one of those sublime movements by which God has been pleased to prepare the world as a habitation for the widely extending family of man.

The grand scenery of Cheddar cliffs can hardly be surpassed in the kingdom, and the rocky combes of Mendip have a romantic beauty, widely different from the calm richness of those of Quantock and the more western hills. The caverns of Mendip are interesting and wonderful, as the tombs of numerous animals, many of which are fortunately now extinct.—In that at Uphill, the Rev. D. H. Williams of Bleadon found bones of rhinocerus, hyæna, bear, ox, horse, stag, fox, and of many small

animals, and of birds. In Hutton cavern have been found bones of elephant, tiger, hyæna, bear, wolf, horse, hare, rabbit, fox, rat, mouse and birds. In Banwell cavern,—buffalo, deer, wolf, bear, fox, mouse or bat. We see in these vestiges that formidable creatures once inhabited our beautiful country, but doubtless at so remote a period, that we may believe the highest order of inhabitants,—man, had little or no possession here; and that therefore the beasts had to strive for supremacy only amongst themselves.

In the Mendip hills are some good examples of trap or volcanic rock. At the eastern side of the railway cutting at Bleadon, there is an interesting example of a downward bend of lias strata, running apparently under mountain limestone, which has been disturbed by the trap.—Lead, calamine, and other metals have from distant time been obtained in the Mendip hills, but mining operations have not been carried on, on a grand scale, at any period.

The coal formation comes next in geological order. All the coal fields of Somersetshire are north of the Mendip range.—Mr. Rutter in his "Delineations of the north western division of the county of Somerset," remarks that "the seams of coal, throughout this district, are comparatively very thin, their aggregate thickness in any single coal pit scarcely exceeding that of one of the ordinary seams in the principal coal fields in England. The district may however be considered rich

in this valuable mineral, and as able to answer largely the future demand. Many of the ancient pits may be drained and worked to advantage, on the present improved system. No coal has been found south of the Mendip range; but since the mountain limestone dips beneath the marshes, towards the Quantock hills, it seems probable that there exists an intermediate basin beneath the red marl, which forms the uppermost sub-stratum in this alluvial tract."

This information Mr. Rutter says he obtained chiefly from Buckland's and Conybeare's observations on the south western coal district of England.

How wonderful is the providential care for man, which is exemplified in the vast stores of coal, preserved from the exuberant vegetation of an early era of creation, to be opened at the times when they were especially required!—In the early period of man's abode on earth, indeed in the early times of most nations, forests supplied fuel; but as multitudes of the human race spread over the world, and their wants increased, they were directed to the stores which had been so marvellously preserved for them.

Philosophers have anticipated the exhaustion of some of the coal districts, and speculated on the inconvenience that will arise; others encourage us with a hope that, before this time shall have arrived, more refined, less dangerous, and less laborious means of supplying light and heat for all our increasing wants, will have been discovered.

New red sand stone comes next in order, being the overlaying rocks of the coal measures. In Somerset this is an extensive and varied series of deposits; it is derived from the disturbed strata of older formations, and known as grauwacke conglomerate, magnesian conglomerate, red marl and red sand. Several varieties of these rocks are strong features of the grauwacke district, and the magnesian conglomerate, or dolomite, forms an important part of the carboniferous and coal districts. These rocks are made up of angular fragments of contiguous strata; or of such as have been brought by the action of water from a moderate distance, and are slightly abraded; or of thoroughly abraded fragments, as those are which compose the shingle bank, the boundary of the channel from Stolford to Sherton. In the western district, many of these rocks contain pebbles of limestone in great abundance, and are called popple rocks; they are extensively worked for lime in many places.

In the neighbourhood of Milverton and Wiveliscombe, the limestone in the conglomerate beds is much worn by abrasion, and they contain such fossils, and have such other characters, as may lead geologists to look to the spaces between Mendip-hills and the Holmes, as the localities from which these water-worn pieces of carboniferous lime-stone rock were derived.

Mount Radford, near Bridgwater, is composed of drifted sand, and small and large rounded and

angular fragments of grauwacke from the Quantock hills, with scarcely a trace of limestone. The gravel which elevates Bridgwater a little above the alluvial land, is rounded, and was probably washed from the Quantocks also; it rests on the red marl, the immediate substratum which extends through so large a part of our county, underlaying the rich levels of Bridgwater, Brent, and Yatton, the Vale of Taunton Deane, as well as many of the smaller vallies, and our lias, green sand and other hills.

Lias is an extensive formation in our district, resting conformably on the new red sand stone.—It forms hills of moderate elevation between Taunton and Somerton, and the Polden hills, from Langport to the river Parret at Pawlet.—It makes the bed of the river at the passage at Combwitch, rises again at Hill in the parish of Otterhampton, and extends in a narrow belt bordering the coast to Blue Anchor. The lias extends no farther westward, except a small patch six miles beyond, at East Lynch.

The cliffs of the coast from Sherton Bars to Blue Anchor are of lias, and its associate, red sand stone, which contains much gypsum between Watchet and Blue Anchor. They present numerous instances of disturbance in curious curvatures and faults, and there are good examples of bold elevated rocks. The features of these rocks, however, undergo frequent changes, by the waves washing away

at the base, and bringing down large masses, from time to time, at no great intervals. The strata of the beach are much contorted; Mr. Horner in his geological survey before alluded to, says, "It would be impossible by any description of particular instances of disturbance, to give an intelligible representation of the extraordinary appearance of the coast, in walking over it at low water. I cannot better convey an idea of it, than by comparing it to the great waves of the sea suddenly consolidated. These waves now broken in many directions exhibit various sections of their internal structure."

The lias of our district is not so rich in organic remains, I believe, as the same formation at Lyme Regis. However, ichthyosauri and plesiosauri have been found as nearly perfect skeletons, those from the vicinity of Street and of Watchet being probably the most perfect. Bones of pterodactylus have also occurred. Pentacrinites, echini, ammonites, and nautili, and numerous species of bivalve and univalve shells are abundant. On the beach near Blue Anchor are multitudes of compressed ammonites, having the beautiful irridescent nacre. The bone or coprolite bed has been found, I believe, wherever the lower strata of the lias have been reached.

The different members of the oolite formation extend across the eastern part of the county, from the neighbourhood of Castle Cary to that of Bath. Inferior oolite caps the lias hills of Dundry, Glas-

tonbury, Brent, &c.* Fossils are very abundant in these beds.

The upper or green oolite is extensively worked in the vicinity of Bath.

The green sand hills called Black Down, are a striking range, bordering the county, south of Taunton and Wellington; their peculiar outline attracts the eye from distant parts of the county.

Although there is very much that is interesting in these two last formations, we must pass lightly over them.

The alluvial lands of our county are very extensive, and proverbially rich. The extended levels opening on the Bristol channel have doubtless been estuaries in recent geological time. Sand banks, parts of former sea-barriers, elevate above the surrounding land Westonzoyland, Chedzoy and other villages, and their valuable corn fields; they prove their comparative late formation by the multitudes of shells which they contain, all of species now living on our coast, and many of them retaining their colour and markings. The lower part of the humerus of a young mammoth has been found at Chedzoy.

Under the rich soil of our levels, beds of peat occur at different depths; they also form the surface of extensive tracts of our county. The Sedgemoors are fast emerging from their morass-like state, and cultivation is spreading widely over them.

* These require further examination; perhaps upper lias may be here.

Our peat bogs at the Burtles still retain much of the wild character of morass; they have been extensively cut for fuel, and now cultivation is gradually doing its beneficial work here also. The botanist and entomologist still find them interesting fields of research, and our friend, Mr. Stradling, has informed us of their antiquarian interest. Beds of peat occur in the clay pits and other excavations near Bridgwater, from twelve to sixteen feet deep, and contain bones of many kinds of animals, horns, shells, and trunks of trees. Similar animal remains, and even pottery, were found by the late Mr. Anstice and myself, mixed with sand, flints, grauwacke, and other gravels, nearly thirty feet beneath the surface, at the old canal basin at Huntworth. Our alluvial lands must be constantly, though slowly, increasing in elevation, as our rocky shores are always wasting. Every inland flood brings down from the hills new material, and in dry weather, when the wind is from the sea, sand is blown from the extensive flat beaches at Burnham, Berrow, Weston, &c., against the sand hills and to the land beyond. When the sun is bright and the breeze favourable, a dried stratum of sand is thus taken up and carried off in light clouds at intervals of about five or ten minutes. When the tide is out, the weather calm, and the sun bright, a dense vapour just covers the beach, and has all the appearance of water at particular parts, producing sometimes the interesting spectacle —mirage.

The following extract from the excellent little book "The Earth's Antiquity, by the Rev. J. Gray," will be in place here. "Treasured in the earth's indurate bosom are medals of creation. A new sense is, as it were, added by geology to man, conveying a before unenjoyed perception of beautiful existences. Scenes previously unappreciated, are now through this newly opened avenue, happily appropriated, and where we hitherto saw only sterile vacuity, there now spring forth to view bright and monitory things. We hear sermons in stones! what is now every mountain range, and swelling hill, that rises before our view? Not, as heretofore, a mere amorphous mass of senseless rock; it is a sanctuary of an Almighty workmanship, elaborated with a skill inconceivable and sublime, through the revolutions of countless time! What is now every chasm, dipping into the secluded recesses of the fractured earth? Not as heretofore, a mere empty, rocky cavern, but a fully tenanted sepulchre of long past races of living beings, which bespeak a Creator no less omnipotent than allwise! He it is who from the beginning hath laid the foundations of the earth, and the whole sustentation of the varied creations thereof has been the sole work of His hand."

However irrelevant such general views may be in an attempt to portray the geological peculiarities of a country where some prevailing formations engross the attention and restrict the labours of

man; such views are singularly applicable to any consideration of the geology of the county of Somerset. It is our privilege to reside in a district where geological extremes meet; where those varieties which are generally separated by great distance, are brought within the range of almost immediate inspection. We are within reach of the lowest formations, and of the latest, while the caverns of the Mendip and the Quantock ranges enable us to contemplate the brilliant results of crystallization, and the astounding remains of animals no longer denizens of England or of Europe. It may indeed, without any undue partiality for this favored county, be permitted us to question, whether there is any spot of equal dimensions on the surface of our planet, where the relative progress of creative energy is more distinctly unfolded, or the bounties dependant on geological distribution more varied or profuse.

At all events we shall be justified in concluding, that there is not any known locality which affords greater facilities and inducements to the patient humble-minded student of nature, or more decided manifestations of the measureless bounty and power of the Creator.

The Somersetshire Fauna.

BY MR. W. BAKER.

Mammalia.

CHEIROPTERA.

VESPERTILIONIDAE.

Great Bat. *Vespertilio noctula*

Common Bat. *V. pipistrellus*

Whiskered Bat. *V. mystacinus*

Long-eared Bat. *Plecotus auritus*

Barbastelle. *Barbastellus Daubentonii*

RHINOLOPHIDAE.

Greater Horse-shoe Bat. *Rhinolophus ferrum-equinum*

Lesser Horse-shoe Bat. *R. hipposideros.*

INSECTIVORA.

ERINACIDAE.

Hedge-hog. *Erinaceus Europæus.*

TALPIDAE.

Mole. *Talpa vulgaris*

SORICIDAE.

Common Shrew. *Sorex araneus*

Water Shrew. *S. fodiens*

Oared Shrew. *S. remifer*

CARNIVORA.

URSIDAE.

Badger. *Meles taxus*

MUSTELIDAE.

Otter. *Lutra vulgaris*

Weasel. *Mustela vulgaris*

Ermine or Stoat. *M. erminea*

Polecat. *M. putorius*

Ferret. *M. furo*

Marten. *Martes foina*

FELIDAE.

Cat. *Felis domestica*

CANIDAE.

Dog. *Canis familiaris*

Fox. *Vulpes vulgaris*

PHOCIDAE.

Common Seal. *Phoca vitulina*

Harp Seal. *P. Grœnlandica*

RODENTIA.

SCIURIDAE.

Squirrel. *Sciurus vulgaris*

Dormouse. *Myoxus avellanarius*

MURIDAE.

Harvest Mouse. *Mus messorius*

Long-tailed Mouse. *M. sylvaticus*

Common Mouse. *M. musculus*

Brown Rat. *M. decumanus*

CASTORIDAE.

Water Vole. *Arvicola amphibius*

Field Vole. *A. agrestis*

Bank Vole. *A. pratensis*

LEPORIDAE.

Hare. *Lepus timidus*

Rabbit. *L. cuniculus*

Guinea Pig. *Cavia aperea*

PACHYDERMATA.

SUIDAE.

Hog. *Sus scrofa*

EQUIDAE.

Horse. *Equus caballus*

Ass. *Asinus vulgaris*

RUMINANTIA.

CERVIDAE.

Red Deer. *Cervus elaphus*

Fallow Deer. *C. dama*

BOVIDAE.

Ox. *Bos taurus*

CAPRIDAE.

Goat. *Capra hircus*

Sheep. *Ovis aries*

CETACEA.

DELPHINIDAE.

Dolphin. *Delphinus delphis*

Bottle-nosed Dolphin. *D. Tursio*

Porpoise. *Phocœna communis*

Grampus. *P. orca*

Round-headed Porpoise. *P. melas*

Bottle-head. *Hyperoodon Butzkopf*

Greenland Whale. *Balœna mysticetus*

Birds.

RAPTORES.

VULTURIDAE.

Egyptian Vulture. *Neophron percnopterus*

White-tailed Eagle. *Aquila albicilla*

Osprey. *Pandion haliœetus*

Peregrine Falcon. *Falco peregrinus*

Hobby. *Falco subbuteo*

Merlin. *F. æsalon*

Kestrel. *F. tinnunculus*

Sparrow Hawk. *Accipiter nisus*

Kite. *Milvus vulgaris*

Buzzard. *Buteo vulgaris*

Rough-legged Buzzard. *B. lagopus*

Honey Buzzard. *Pernis apivorus*

Marsh Harrier. *Circus æruginosus*

Hen Harrier. *C. cyaneus*

Montagu's Harrier. *C. Montagui*

STRIGIDAE.

Long-eared Owl. *Otus vulgaris*

Short-eared Owl. *O. brachyotos*

White Owl. *Strix flammea*

*Tawny Owl. *Syrnium stridulum*

Little Owl. *Noctua passerina*

Tengmalm's Owl. *N. Tengmalmi*

DENTIROSTRES.

LANIADAE.

Great Grey Shrike. *Lanius excubitor*

Red-backed Shrike. *L. collurio*

Woodchat Shrike. *L. rutilus*

MUSCICAPIDAE.

Spotted Flycatcher. *Muscicapa grisola*

Pied Flycatcher. *M. atricapilla*

MERULIDAE.

Water Ouzel. *Cinclus aquaticus*

Missel Thrush. *Turdus viscivorus*

Fieldfare. *T. pilaris*

Song Thrush. *T. musicus*

Redwing Thrush. *T. iliacus*

Blackbird. *T. merula*

Ring-ouzel. *T. torquatus*

Golden Oriole. *Oriolus galbula*

SYLVIADAE.

Alpine Accentor. *Accentor alpinus*

Hedge Sparrow. *A. modularis*

Redbreast. *Erythaca rubecula*

Redstart. *Phœnicura ruticilla*

Black Redstart. *P. Tithys*

Stonechat. *Saxicola rubicola*

Whinchat. *S. rubetra*

Wheatear. *S. œnanthe*

* Hawk Owl, *Surnia funerea*, has been recorded since this list was drawn up.

Grasshopper Warbler. *Salicaria locustella*

Sedge Warbler. *S. Phragmitis*

Reed Warbler, *S. arundinacea*

Nightingale. *Philomela luscinia*

Blackcap. *Curruca atricapilla*

Garden Warbler. *C. hortensis*

White-throat. *C. cinerea*

Lesser white-throat. *C. sylviella*

Wood Warbler. *Sylvia sibilatrix*

Willow Warbler. *S. trochilus*

Chiff Chaff. *S. hippolais*

? Dartford Warbler. *Melizophilus provincialis*

Gold-crested Wren. *Regulus auricapillus*

PARIDAE.

Great Titmouse. *Parus major*

Blue Titmouse. *P. cæruleus*

Cole Titmouse. *P. ater*

Marsh Titmouse, *P. palustris*

Long-tailed Titmouse. *P. caudatus*

Bearded Titmouse. *Calamophilus biarmicus*

AMPELIDAE.

Bohemian Wax-wing. *Bombycilla garrula*

MOTACILLIDAE.

Pied Wagtail. *Motacilla Yarrellii*

White Wagtail. *M. alba*

Grey Wagtail. *M. boarula*

Grey-headed Wagtail. *M. neglecta*

Ray's Wagtail. *M. flava*

ANTHIDAE.

Tree Pipit. *Anthus arboreus*

Meadow Pipit. *A. pratensis*

Rock Pipit. *A. petrosus*

? Richard's Pipit. *A. Richardi*

CONIROSTRES.

ALAUDIDAE.

Shore Lark. *Alauda alpestris*

Sky Lark. *A. arvensis*

Wood Lark. *A. arborea*

EMBERIZIDAE.

Snow Bunting. *Plectrophanes nivalis*

Common Bunting. *Emberiza miliaria*

Blackheaded Bunting. *E. schæniculus*

Yellow Bunting. *E. citrinella*

Cirl Bunting. *E. cirlus*

Ortolan. *E. hortulana*

FRINGILLIDAE.

Chaffinch. *Fringilla cœlebs*

Mountain Finch. *F. montifringilla*

Tree Sparrow. *Passer montanus*

House Sparrow. *P. domesticus*

Greenfinch. *Coccothraustes chloris*

Hawfinch. *C. vulgaris*

Goldfinch. *Carduelis elegans*

Siskin. *C. spinus*

Common Linnet. *Linota cannabina*

Mealy Redpole. *L. canescens*

Lesser Redpole. *L. linaria*

Mountain Linnet. *L. montium*

Bullfinch. *Pyrrhula vulgaris*

Pine Grosbeak. *P. enucleator*

Common Crossbill. *Loxia curvirostra*

?Parrot Crossbill. *L. pytiopsittacus*

STURNIDAE.

Starling. *Sturnus vulgaris*

CORVIDAE.

Chough. *Fregilus graculus*

Raven. *Corvus corax*

Carrion Crow. *C. corone*

Hooded Crow. *C. cornix*

Rook. *C. frugilegus*

Jackdaw. *C. monedula*

Magpie. *Pica caudata*

Jay. *Garrulus glandarius*

Nutcracker. *Nucifraga caryocatactes*

SCANSORES.

PICIDAE.

Great Black Woodpecker. *Picus martius*

Green Woodpecker. *P. Viridis*

Greater Spotted Woodpecker. *P. major*

Lesser Spotted Woodpecker. *P. minor*

Wryneck. *Yunx torquilla*

CERTHIADAE.

Creeper. *Certhia familiaris*

Wren. *Troglodytes vulgaris*

Hoopoe. *Upupa epops*

Nuthatch. *Sitta Europæa*

CUCULIDAE.

Cuckoo. *Cuculus canorus*

FISSIROSTRES.

HALCYONIDAE.

Kingfisher. *Alcedo ispida*

HIRUNDINIDAE.

Swallow. *Hirundo rustica*

Martin. *H. urbica*

Sand Martin. *H. riparia*

Swift. *Cypselus murarius*

Alpine Swift. *C. alpinus*

CAPRIMULGIDAE.

Nightjar. *Caprimulgus Europæus*

RASORES.

COLUMBIDAE.

Wood Pigeon. *Columba palumbus*

Stock Dove. *C. œnas*

Rock Dove. *C. livia*

Turtle Dove. *C. turtur*

PHASIANIDAE.

Pheasant. *Phasianus Colchicus*

TETRAONIDAE.

Black Grouse. *Tetrao tetrix*

Partridge. *Perdix cinerea*

Red-legged Partridge. *P. rubra*

Quail. *Coturnix dactylisonans*

STRUTHIONIDAE.

Little Bustard. *Otis tetrax*

GRALLATORES.

CHARADRIADAE.

Great Plover. *Œdicnemus crepitans*

Golden Plover. *Charadrius pluvialis*

Dotterel. *C. morinellus*

Ringed Dotterel. *C. hiaticula*

Grey Plover. *C. Squatarola cinerea*

Lapwing. *Vanellus cristatus*

Turnstone. *Strepsilas interpres*

Sanderling. *Calidris arenaria*

Oystercatcher. *Hæmatopus ostralegus*

ARDEADAE.

Heron. *Ardea cinerea*

Squacco Heron. *A. comata*

Little Bittern. *Botaurus minutus*

Common Bittern. *B. stellaris*

Night Heron. *Nycticorax Europæus*

White Stork. *Ciconia alba*

Black Stork. *C. nigra*

White Spoonbill. *Platalea leucorodia*

Glossy Ibis. *Ibis falcinellus*

SCOLOPACIDAE.

Curlew. *Numenius arquata*

Whimbrel. *N. phœopus*

Spotted Redshank. *Totanus fuscus*

Common Redshank. *T. calidris*

Green Sandpiper *T. ochropus*

Common Sandpiper. *T. Hypoleucos*

Greenshank. *T. glottis*

Black-tailed Godwit. *Limosa melanura.*

Bartailed Godwit. *L. rufa*

Ruff. *Machetes pugnax*

Woodcock. *Scolopax rusticola*
Great Snipe. *S. major.*
Common Snipe. *S.gallinago*
Jack Snipe. *S. gallinula*
Knot. *Tringa subarquata*
Little Stint. *T. minuta*
Dunlin. *T. variabilis*
Purple Sandpiper. *T. maritima*

RALLIDAE.

Landrail. *Crex pratensis*
Spotted Crake. *C. Porzana*
Little Crake. *C. pusilla*
Baillon's Crake, *C. Baillonii*
Water Rail. *Rallus aquaticus*
Moorhen. *Gallinula chloropus*

LOBIPEDIDAE.

Coot. *Fulica atra*
Grey Phalerope. *Phalaropus lobatus*

NATATORES.

ANATIDAE.

Grey-legged Goose. *Anser ferus*
Bean Goose. *A. segetum*
White-fronted Goose. *A. albifrons*
Bernicle Goose. *A. leucopsis*
Brent Goose. *A. Brenta*
Red-breasted Goose. *A. ruficollis*
Egyptian Goose. *A. Egyptiacus*
Hooper. *Cygnus ferus*
Mute Swan. *C. olor*
Shieldrake. *Tadorna vulpanser*
Shoveller Duck. *Anas clypeata*
Gadwall. *A. strepera*
Pintail Duck. *A. acuta*
Wild Duck. *A. boschas*
Garganey. *A. querquedula*
Teal. *A. crecca*
Wigeon. *A. Penelope*
Eider Duck. *Somateria mollissima*
Velvet Scoter. *Oidemia fusca*
Common Scoter. *O. nigra*
Pochard. *Fuligula ferina*
Scaup Duck. *F. marila*
Tufted Duck. *F. cristata*
Golden Eye. *F. chrysophthalmos*
Smew. *Mergus albellus*
Hooded Merganser. *M. cucullatus*
Red-breasted Merganser. *M. serrator*
Goosander. *M. merganser*

COLYMBIDAE.

Great-crested Grebe. *Podiceps cristatus*
Red-necked Grebe. *P. rubricollis*

Sclavonian Grebe. *P. cornutus*

Dabchick. *P. minor*

Great Northern Diver. *Colymbus Glacialis*

Black-throated Diver. *C. arcticus*

Red-throated Diver. *C. septentrionalis*

ALCADAE.

Guillemot. *Uria troile*

Brunnick's Guillemot. *U. Brunnichii*

Little Auk. *Mergulus melanoleucos*

Puffin. *Fratercula arctica*

Razor Bill. *Alca torda*

PELECANIDAE.

Cormorant. *Phalacrocorax carbo*

Shag. *P. cristatus*

Gannet or Solan Goose. *Sula bassana*

LARIDAE.

Sandwich Tern. *Sterna cantiaca*

Common Tern. *S. hirundo*

Arctic Tern. *S. arctica*

Lesser Tern. *S. minuta*

Black Tern. *S. nigra*

Sabine's Gull. *Larus Sabinii*

Black-headed Gull. *L. ridibundus*

Kittiwake. *L. Rissa.*

Ivory Gull. *L. eberneus*

Common Gull. *L. canus*

Iceland Gull. *L. Islandicus*

Lesser Black-backed Gull. *L. fuscus*

Herring Gull. *L. argentatus*

Great Black-backed Gull. *L. marinus*

Glaucus Gull. *L. glaucus*

Common Skua. *Lestris cataractes*

Pomarine Skua. *L. pomarinus*

Richardson's Skua. *L. Richardsonii*

Fulmar Petrel. *Procellaria glacialis*

Fork-tailed Petrel. *Thalassidroma Bullockii*

Storm Petrel. *T. pelagica*

Reptiles.

TESTUDINATA.

CHELONIADAE.

Hawk's Bill Turtle. *Chelonia imbricata*

SAURIA.

LACERTADAE.

Viviparous Lizard. *Zootoca vivipara*

SQUAMATA.

SAUROPHIDIA.

ANGUIDAE.

Slow-Worm. *Anguis fragilis*

OPHIDIA.

COLUBRIDAE.

Ringed Snake. *Natrix torquata*

VIPERADAE.

Viper, or Adder. *Pelius Berus*

AMPHIBIA.

ANOURA. RANADAE.

Frog. *Rana temporaria*

BUFONIDAE.

Toad. *Bufo vulgaris*

URODELA.

SALAMANDRADAE.

Warty Newt. *Triton cristatus*

Smooth Newt. *Lissotriton punctatus*

Palmated smooth Newt. *L. palmipes*

List of Birds' Eggs found in Somersetshire,

WITH OBSERVATIONS.

BY MR. W. D. CROTCH.

RAPTORES.

FALCONIDAE. FALCO.

1.—Falco subbuteo.—*Hobby.*

Eggs of this species are rare in collections, and I am not aware of any other specimen, besides the one in my possession, having been obtained in this county; the egg is of a short oval form, 1 inch 8 lines in length, by 1 inch 5 lines in breadth, in colour a deep reddish brown, speckled with darker brown. My own specimen I obtained on the Steep Holmes in the Bristol Channel, on May 11th, 1849.

2.—F. tinnunculus.—*Kestrel.*

This poor persecuted bird still continues to supply the demand for eggs and skins, so unrelentingly imposed upon it, and in return for this unholy persecution does gamekeepers and farmers all the good in its power by devouring mice, rats, weasels, &c. in immense numbers; its eggs are very variable, but commonly of a pale brown, freckled and blotched with darker

brown, 1 inch 7 lines in length, and about 1 inch 3 lines in breadth. It more commonly takes possession of some deserted nest of the crow or magpie, than makes one for itself; the young are in general hatched by the beginning of May.

ACCIPITER.

3.—Accipiter fringillarius.—*Sparrow Hawk.*

This bird is not perhaps more rare than its congener the kestrel, but is less likely to be observed from its habit of gliding noiselessly over low hedges, never hovering suspended in the air, like the before mentioned hawk. Its eggs are very beautiful, being of a pale blue ground colour, sparingly blotched with deep chocolate brown, in size the same as those of the kestrel; and like them this species seldom prepares a nest on its own account, preferring those of the crow.

BUTEO.

4.—Buteo vulgaris.—*Common Buzzard.*

The ranks of this noble but destructive hawk, have been sadly thinned by game-keepers, to whom they prove a formidable enemy. A few may still however be seen among the ranges of the Quantocks. Wheeling and gliding at an immense height, with the extraordinary powers of vision these birds are known to possess, what a field of view must be opened to them! the mountains in Wales, and the lofty ranges of Yorkshire and Cumberland are before them; a few strokes of their powerful wings, and they would be beyond the reach of those who think a hawk fair game for every destructive contrivance invented. That these birds do at times breed on some inacces-

sible cliff in this county seems probable, but I am not aware of eggs obtained in this county being in any collection. Their size is 2 inches 3 lines in length, by 1 inch 10 lines in breadth; in colour a soiled white, slightly spotted with pale brown. In Scotland they breed on cliffs, but prefer trees when sufficiently commodious for their purpose.

STRIGIDAE. STRIX.

5.—Strix flammea.—*White or Barn Owl.*

The extraordinary peculiarity of incubation, confined, as I believe, to the strigidæ or family of the owls, is fully borne out by the species in question; I allude to the finding in the same nest, and at the same period, young birds in various stages of developement; and also eggs, some far advanced in incubation, others newly laid; so that the sole business of the parent birds, during the breeding season, must consist in rearing and providing for their progeny; and that this season is of considerable duration, seems proved by the fact of young birds being found in the nest so late as December. The eggs of this and of other owls are white; the size in this species is 1 inch 6 lines in length, by 1 inch 3 lines in breadth.

SYRNIUM.

6.—Syrnium Aluco.—*Tawny Owl.*

Eggs of this species are larger in proportion than those of the preceding; they are smooth and white, in length 1 inch 10 lines, and in breadth 1 inch 6 lines; they are usually found in some hollow tree about the month of April. I however found some eggs of this species in a rabbit hole on the neighbouring hills.

INSESSORES.

DIVISION DENTIROSTRES.

LANIADAE. LANIUS.

7.—Lanius collurio.—*Common Butcher Bird.*

The extraordinary size of nest used by these birds is worthy of notice; itself not so large as a thrush, it makes a clumsy, large, cup-shaped nest of fibrous roots, lined with dry bents and a few hairs; its eggs are readily distinguishable from those of any other bird, from the spots being disposed so as to form a zone, generally, though not always, on the large end of the egg; their colour is variable, being frequently of a yellowish, greenish, or bluish tint, spotted with darker colour; in length 11 lines, by 8 lines in breadth.

MUSCICAPIDAE. MUSCICAPA,

8.—Muscicapa grisola.—*Spotted Fly Catcher.*

This pretty bird is one of our latest summer visitors, seldom or never making its appearance till on or about May 20th, when it immediately commences the construction of its nest, which is frequently found in singular situations; a bird cage accidently left out in a garden, a lamp post in a street at Leeds, another near Portland Place, London, have been selected by this bird for a habitation; the eggs are 9 lines in length by 7 lines in breadth, white, sometimes tinged with blue and spotted with pale red.

9.—M. atricapilla.—*Pied Fly Catcher.*

This rare bird is noticed in Yarrell's British birds, as breeding in Westmoreland, and even there in limited numbers, and peculiar localities; it is therefore with great pleasure I record the occurrence of the nest

in our county, and in this immediate neighbourhood; the eggs are of a delicate pale blue, unlike those of the hedge sparrow, slightly resembling those of the redstart, but from which the plumage of the parents effectually distinguish them. The nest was placed in ivy against a wall, together with others of its congener, the fly catcher. The eggs vary in size, perhaps the average is 8½ lines long, by 6½ lines broad.

MERULIDAE. CINCLUS.

10.—Cinclus aquaticus.—*Water Ouzel*,

This bird uses great art to conceal its large domed nest, which is composed of moss, closely interwoven and lined with dry leaves, having an aperture at the side, like that of the common wren: it has been found behind the sheet of water formed by a cascade, which it would be supposed would have effectually screened it from observation. The eggs are white, from four to six in number, oval and pointed, in length 1 inch, by 9 lines in breadth.

TURDUS.

11.—Turdus viscivorus.—*Missel Thrush or Holm Screech.*

This bird may now be found in every orchard, though at the time of the immortal Berwick so rare, that it was with difficulty he procured a specimen for his work. Egg 1 inch 3 lines, by 11 lines, ground colour greenish white, spotted with brown, but variable both in size and in colour.

12.—T. musicus.—*Song Thrush.*

I once found an old deserted nest of this bird, the lining of mud was cracked, there was a hole through the

bottom, the entire fabric was in complete dishabille ; I hesitated as to whether I should demolish it, it had cost me scratched hands and a torn coat ; yet, a rotten thing, I thought it not worth the trouble. A week after, coming in a different direction and not recognizing the spot, I climbed up to the nest ; there were four eggs in it, one of which was lodged in the hole at the bottom, in such a manner that it must have puzzled the young bird to extricate himself when the eggs were hatched, as in due season they were. The eggs are of a beautiful blue, spotted with black, in length, 1 inch 1 line by 10 lines.

13.—T. merula.—*Blackbird.*

This bird's eggs are generally of a pale blue, freckled all over with brown, but occasionally of one pure blue tint, length 1 inch 2 lines, breadth 11 lines.

14.—T. torquatus.—*Ring Ouzel.*

This bird breeds sparingly on our high ranges of hills, the eggs are similar to those of the blackbird, but the spots are much clearer and more defined.

SYLVIADAE. ACCENTOR.

15.—Accentor modularis.—*Hedge Sparrow.*

The eggs, colour bright greenish blue, length 9½ lines by 6½ lines. Two broods are produced during the season.

ERYTHACA.

16.—Erythaca rubecula.—*Redbreast.*

The size of the egg 9½ lines in length by 7½ in breadth ; colour yellowish white, spotted with pale red.

PHŒNICURA.

17.—Phœnicura ruticilla.—*Redstart.*

This bird builds in hollow trees, eggs generally six in number, of a pale spotless blue, 8½ lines in length by 6½ lines in breadth.

SAXICOLA.

18.—Saxicola rubicola.—*Stonechat.*

This bird builds early in April, its eggs are six in number, in colour a pale greyish blue, the large end minutely freckled with brown.

19—S. rubetra.—*Whinchat.*

This bird in habits is very similar to the preceding; the nests are alike, the eggs are bluish green, very minutely speckled with brown. These birds are double brooded.

20.—S. ænanthe.—*Wheatear.*

Though seldom seen in this immediate neighbourhood, these birds may be found in great numbers, especially on their arrival in March, along our coast, on downs, and in warrens generally, where they build in April, usually placing their nest in some hole in a wall, or under the scattered rocks found on the downs they inhabit. The nest is commonly found beyond the reach of the arm, and their eggs, are in consequence procured with difficulty. They are of a very elegant shape, 10½ lines in length by 7 lines in breadth, and of a delicate pale blue colour.

SALICARIA.

21.—Salicaria locustella.—*Grasshopper Warbler.*

The eggs of this species are difficult to procure, from the exceedingly shy nature of the bird; they breed in May, the eggs are pale reddish white, freckled all over with red, in length 8 lines, by breadth 6 lines.

22.—S. phragmitis.—*Sedge Warbler.*

The eggs of this bird bear such a resemblance to those of the yellow water-wagtail as scarcely to admit of separation, if accidentally mixed; their size is however

a little inferior to that of the above mentioned species; the colour is a yellowish brown, mottled with darker brown, and size 8 lines long by 6 broad.

23.—S. arundinacia.—*Reed Warbler.*

The same unerring instinct which prompts these birds to build their nest among reeds, so supple as to be bowed to the water's edge with every breath of wind, has also provided a resource against danger, by teaching them to form it so long and deep, that the precious cargo it contains rides as securely in the storm as in the calm; this nest, suspended as it is from three or four reeds, and with its elegant cup-like shape, is, as may be imagined, a beautiful object; fortunately for the bird, even love of beauty is not always sufficient to induce the admirer to wade knee deep in mud and water for a sight of the object of his admiration. The eggs are greenish white, freckled and spotted with ash green and light brown, in length 9 lines by $6\frac{1}{2}$ lines in breadth; they breed early in June.

PHILOMELA.

24.—Philomela luscinia.—*Nightingale.*

The colour of the eggs in this species is olive green, 10 lines in length, and $8\frac{1}{2}$ lines in breadth, with which information I hope all well disposed hearers will be content, and suffer the queen of songsters to rear her brood unmolested.

CURRUCA.

25.—Curruca atricapilla.—*Blackcap.*

This is a splendid songster, second only to the Nightingale, but alas! the beauty of its eggs causes them to be found on every school boy's string, trophies of burglary. They are 9 lines long, by 7 lines broad. In colour reddish white, spotted with dark brown.

26.—C. hortensis.—*Garden Warbler.*

Eggs of this species are rare, they are of a greenish white, speckled and spotted with ash green and light brown, the length 9 lines, breadth 6½ lines.

27.—C. cinerea.— *Common Whitethroat.*

The colour of the egg of this bird is as that of the preceding, but more distinctly spotted.

28.—C. sylviella.—*Lesser Whitethroat.*

The eggs of this bird, which is uncommon, at least in this county, may be readily known from those of the preceding by the purer white of the ground and the more distinct character of the spots; their size is 8 lines in length, by 6 lines in breadth ; they breed in May.

SYLVIA.

29.—Sylvia Sibillatrix.— *Wood Warb'er.*

S. Trochilus.— *Willow Warbler.*

S. Hippolais.— *Chiff Chaff.*

The distinction between the eggs of these birds, though slight, is very appreciable. The nest of the wood warbler may be distinguished from the two others by the absence of a lining of feathers, used by them ; the spots also on the eggs of this species are very numerous, of a deep purple red colour on a reddish white ground, while those on the eggs of the willow warbler, are much smaller. The egg of the chiff chaff is sparingly spotted with purple red, and is slightly smaller than those of the foregoing, being 7 lines in length by 5½ lines in breadth. They breed early in May.

REGULUS.

30.—Regulus auricapillus.—*Golden Crested Wren.*

The beautiful nest of this very elegant little bird will repay

attention ; it is composed of the softest moss, securely woven among the pendant leaves of the fir, and snugly lined with feathers. In this are deposited from six to ten eggs, 6 lines in length by 5 lines in breadth, of a pale flesh colour, or white spotted faintly with pale red.

PARIDAE. PARUS.

31.—Parus major.—*Great Titmouse.*

Builds in holes. Eggs 9½ lines long, by 7 lines broad, white speckled with red.

32.—P. cæruleus.—*Blue Tit.*

This bird has obtained the sobriquet of Billy biter among bird-nesting boys, from his determined valour in defending his habitation against intrusion ; perhaps the numerous progeny he has to defend may have something to do with this; at all events from ten to fifteen eggs, far exceeding in bulk the parent bird, must necessarily require the greatest attention ; the eggs are white spotted with red, in size 7½ lines in length, by 6 lines in breadth.

33.—P. ater.—*Cole Tit.*

The hole chosen by this bird is in general situated at the roots of a tree, in which are deposited from six to eight white eggs, speckled with pale red, slightly smaller than those of the blue tit.

34.—P. caudatus.—*Longtailed Tit.*

The nest of this bird is perfect in its kind, it is a complete oval, finished off smoothly, and in the most regular manner, and there is a small hole in the side by which access is obtained to the chamber within, the outside being studded all over with silvery lichens ; but all this beauty is concealed by its being placed in the

centre of some bush which must be cut away before the nest can be secured. The eggs are white, 7 lines in length by 5 lines in breadth.

35.—P. palustris.—*Marsh Tit.*

This bird builds in holes, more frequently in decayed willows, in marshy places. Eggs resemble those of the cole tit.

MOTACILLIDAE. MOTACILLA.

36.—Motacilla Yarrellii.—*Pied Wagtail.*

Eggs not unlike some varieties of the house sparrow, 9 lines by 7 lines, white speckled with ash colour.

37.—M. flava.—*Ray's or Yellow Wagtail.*

These eggs cannot be distinguished if accidentally mixed with those of the sedge warbler. They are yellowish white, mottled with brown of various shades, 8½ lines by 7 lines.

ANTHIDAE. ANTHUS.

38.—Anthus arboreus.—*Tree Pipit.*

The eggs are exceedingly varied in colour, so much so that no casual observer would believe them to be the produce of the same bird. They are 10 lines by 8 lines, and in colour run through various shades of grey, green, brown, and red in their markings, on a paler ground.

39.—A. pratensis.—*Meadow Pipit.*

These eggs are as similar, as those of its congener, the tree pipit, are dissimilar, being of a greyish brown, mottled with darker, the markings forming a ring round the large end. The length 9 lines by 7 lines.

40.—A. aquaticus.—*Rock Pipit.*

Eggs 4 or 5 in number, of a greyish white, mottled with ash brown, 9½ lines by 7½ lines. Breeds on the coast.

DIVISION CONIROSTRES.

ALAUDIDAE. ALAUDA.

41.—A. arvensis.—*Skylark.*

Eggs greyish white, mottled with darker grey and ash brown, 11 lines by 8½ lines.

42.—A. arborea.—*Woodlark.*

These birds through the great demand for them as songsters are gradually becoming so rare, that a nest is in some parts a rarity. The eggs are pale reddish white, spotted and speckled with dull brown, 9½ lines by 7 lines.

EMBERIZIDAE. EMBERIZA.

43.—Emberiza miliaris.—*Common Bunting.*

Breeds about the end of April, laying four or five eggs of a purplish white ground colour, streaked and spotted with dark purple brown, 1 inch by 8½ lines.

44.—E. schœniculus.—*Black headed Bunting, or Reed Sparrow.*

The eggs of this bird are of a pale purple brown or smoke colour, streaked with darker brown, almost black, 9½ lines by 7 lines.

45.—E. citrinella.—*Yellow Ammer.*

The name of this bird should as its derivation appears to denote, be written without an "h," ammer being the German for bunting, as "Schnee-ammer," the snow bunting, "Grau-ammer," the common bunting, &c. Eggs pale purplish white, veined and speckled with dark reddish brown, length 10½ lines by 7 lines. They are hatched early in June.

46.—E. Cirlus.—*Cirl Bunting.*

The eggs of this species are similar to those of the preceding, perhaps a little whiter in their ground colour. They are rare and found mostly near the coast.

FRINGILLIDAE. FRINGILLA.

47.—Fringilla cœlebs.—*Chaffinch.*

This bird, as are the finches generally, is remarkable for the beauty of its nest, besides the neatness of its construction, it being composed of moss, lined with wool, then with hair and feathers, and lastly studded on the outside with silvery lichens, to which adornment the bird is decidedly partial, for on one occasion some scraps of paper, perhaps forlorn remnants of a love letter, were adopted; but whether in lieu or in preference of the more usual ingredient, I am unable to say. The eggs are of a purplish buff colour, sparingly streaked and spotted with dark reddish brown, length 8½ lines by 6 lines.

48.—Passer montana.— *Tree Sparrow.*

The eggs of this bird differ but very slightly from those of the common house sparrow; with regard to the nest however, it has been observed, and I have repeatedly verified it, that the entrance to it is in this species from the outside of the thatch, by which contrivance, one would imagine they were inspired by pure spirit of mischief; for what advantage can accrue to themselves from a drenching from every shower, it is not easy to conceive.

PASSER.

49.—P. domesticus.—*Common House Sparrow.*

Eggs exceedingly variable, both in size and colour, perhaps averaging 10 lines by 7 lines, white, spotted and streaked with green, grey or brown, and even, though rarely, of a pure white.

COCCOTHRAUSTES.

50.—Coccothraustes chloris.—*Greenfinch.*

Breeds towards the end of April, laying from four to six

eggs, of a pale greenish blue, spotted chiefly on the large end with dark brown and purple, 9½ lines by 6 lines.

CARDUELIS.

51.—Carduelis elegans.—*Goldfinch.*

The nest of this bird is as remarkable for its neatness and elegance as is the little architect itself. Their choice of materials too is very amusing. A pair breeding in a garden were supplied with wool, with which they composed their nest, but on cotton being offered them they rejected the wool, and lastly the cotton also, on the introduction of fine down, with which they ultimately finished the structure. The eggs are pale bluish white, with a few spots and streaks of purple and brown, 8½ lines by 6 lines.

LINOTA.

52.- Linota cannabina.—*Common Linnet.*

The eggs are similar in colour and size to those of the goldfinch, but occasionally varying, and have been frequently offered for sale as those of the lesser redpole, which bird however does not breed farther south than Yorkshire, and is a winter visitor only to our western counties. That a pair may now and then remain and breed, is possible; such however have never come under my notice.

PYRRHULA.

53.—Pyrrhula vulgaris.—*Bullfinch.*

This bird retires during the breeding season to the most unfrequented woods in its neighbourhood, which accounts for the comparative scarcity of its eggs, considering the common appearance of this eminent devourer of buds, in whose gizzard I have never found the remains of a single insect: the rascal also

seems to choose such buds as contain embryo blossoms, rejecting those that produce leaves ; unlike the blue titmouse which only devours such buds as contain insects, and which on that account would never arrive at maturity. The eggs are of a pale blue, spotted and streaked with purple.

STURNIDAE. STURNUS.

54.—Sturnus vulgaris.—*Starling.*

The eggs of a uniform pale blue, 1 inch 2 lines by 10 lines.

CORVIDAE. CORVUS.

55.—Corvus corax.—*Raven.*

A pair of these birds for many seasons made their nest in Willet tower, in this neighbourhood ; it is however now deserted. A pair also have bred on Brean Down, near Weston-super-Mare. I obtained an egg from thence last season, or rather should have obtained it, for on being drawn up from the nest, which was built midway on the side of a cliff, the egg was unfortunately crushed in the pocket of the coat of the finder, and as it was addled, the perfume was not the most agreeable imaginable. The eggs are 2 inches by 1 inch 4 lines, of a pale green, spotted and speckled with a dark greenish brown.

56.—C. corone.—*Carrion crow.*

Eggs 1 inch 8 lines by 1 inch 2 lines, of a pale bluish green, spotted and speckled with ash green and various shades of brown.

57.—C. frugilegus.—*Rook.*

These birds are among our earliest breeders, commencing their task in March, repairing the nest of the previous year, and depositing four or five eggs, of a pale green, blotched with dark greenish brown, 1 inch 8 lines by 1 inch 2 lines.

58.—C. monedula.—*Jackdaw.*

The quantity of sticks amassed by these birds for their nest is really amazing; on one occasion having commenced on a step in a church tower, and being puzzled to make a firm basis, they added stick after stick as supports, till they arrived at a landing six or seven steps below the situation chosen. The eggs are 1 inch 7 lines by 1 inch ½ line, of a pale bluish white, spotted with ash-colour and clove brown.

PICA.

59.—Pica caudata.—*Magpie.*

Whether the obstacles enhance the pleasure of the attempt or not, it is astonishing that a nest so well defended against attacks, as is that of this bird, should be plundered as it is; for though built of thorns, all the points of which project outwards, and the entrance at the side not large enough to admit the hand, yet the eggs are as surely to be seen on the string of the school-boy as those of thrushes and blackbirds; they are 1 inch 4½ lines by 1 inch, of a pale greenish white, spotted all over with various shades of greenish brown.

GARRULUS.

60.—Garrulus glandarius.—*Jay.*

The eggs of a yellowish white, thickly speckled all over with light brown.

SCANSORES.

PICIDAE. PICUS.

61.—Picus viridis.—*Green Woodpecker.*

These birds make no nest, depositing their eggs on the soft particles of decayed wood in the holes of trees, which they excavate for themselves, carrying away the frag-

ments of wood which might otherwise betray their retreat. The eggs are of a pure shining white, 1 inch 2¼ lines by 10¼ lines. They breed in May.

62.—P. major. *Great Spotted Woodpecker.*

Though this bird is said to be our commonest species of woodpecker, after the one before mentioned; I have never succeeded in finding the eggs, and indeed I have but seldom met with the bird itself in this county. The eggs are white and shining, 1 inch by 9 lines.

63.—P. minor.—*Lesser Spotted Woodpecker.*

The eggs of this bird are very similar to those of the wryneck, but are not deposited on a nest, like those of that bird; they are white and shining, 9½ lines by 7 lines.

CERTHIADAE. YUNX.

64.—Yunx torquilla.—*Wryneck.*

This bird when surprised in its nest in some hollow tree, hisses loudly, elevating its crest, and writhing its head, so as to resemble a snake, when, taking advantage of a moment of hesitation, it starts out and escapes from a retreat whence egress seemed impossible. The eggs are white and smooth, from six to ten in number, 9½ lines by 7 lines.

CERTHIA.

65.—Certhia familiaris.—*Common Tree Creeper.*

This bird is an early breeder, laying from seven to nine eggs in April, they are white, with a few pale red spots at the large end, sometimes forming a ring, 8 lines by 5 lines. The nest is composed of small twigs lined with hair and dark coloured wool, and is usually situated on the inner side of some partially detached

portion of bark, though sometimes it may be found in a hole of a tree, which in this case generally has a very small aperture.

TROGLODYTES.

66.—Troglodytes vulgaris.—*Wren.*

How, in a nest, the neatness and beauty of which every one has admired, composed of moss and lined with the softest feathers, provided with an entrance not large enough to admit two fingers, and which contains from seven to eleven young ones, the parent can distinguish among so many claimants for food, to which the turn of favor belongs, is indeed wonderful. The old bird seldom enters the nest with her provision, merely clinging to its side; a dozen heads are instantly at the aperture, each greedy as may be; how she distinguishes between those already fed, and those requiring food, has always appeared to me a great mystery. The eggs are 7½ lines by 6 lines, white or slightly speckled with pale red.

SITTA.

67.—Sitta Europæa.—*Nuthatch.*

The situation chosen by this bird for its nest, is some hole in the tree, usually one with a large entrance, which it ingeniously plasters with mud till the hole is but large enough to admit its diminutive self. The eggs greatly resemble those of the greater titmouse, in length 9 lines by 7 lines, white with a few pale red spots.

CUCULIDAE. CUCULUS.

68.—Cuculus canorus.—*Cuckoo.*

Eggs of this bird have now been found in nests of hedge-sparrows, robin, redstart, wagtail, whitethroat, the warblers, meadow titlark, rock pipit, skylark, yellow-

ammer, chaffinch, greenfinch, linnet, and blackbird, of which those of the hedge-sparrow and titlark have the preference. They are very small, equalling exactly in size the eggs of the skylark, though the difference of the birds is four to one. Colour of the egg a reddish grey, size 11 lines by 8 lines.

INSESSORES.

FISSIROSTRES.

HALCYONIDAE. ALCEDO.

69.—Alcedo Ispida.—*Kingfisher.*

The eggs of this species are nearly globular in shape, 10½ lines by 9 lines, of a pure and shining white, deposited in some hole in a river bank, occasionally on a layer of fish-bones.

HIRUNDINIDAE. HIRUNDO.

70,—Hirundo rustica,—*Swallow.*

Egg 9½ lines by 6½ lines, white speckled with ash colour and dark red. These birds have two broods in the season, the first in June, the other in August.

71.—H. urbica.—*Martin.*

Eggs smooth and white, 9 lines by 6 lines, three or four broods in the season.

72.—H. riparia.—*Sand Martin.*

Eggs as the preceding, but smaller, 8 lines by 6 lines.

CYPSELUS.

73. —Cypselus murarius.—*Swift.*

The nest of these birds seems glued together, probably by some secretion from themselves. Eggs from two to four in number, white, 1 inch by 8 lines.

CAPRIMULGIDAE. CAPRIMULGUS.

74.—Caprimulgus Europæus.—*Nightjar.*

The eggs of this bird are perhaps the most beautiful of any

in Britain, in shape they are a perfect oval, 1 inch 2 lines by 10 lines, white, beautifully clouded and veined with blueish grey and brown. They make no nest.

RASORES.

COLUMBIDAE. COLUMBA.

75.—Columba palumbus.—*Ring Dove.*

The nest of this bird is so slight that the eggs may not unfrequently be discerned through it; they are white and oval, 1 inch 8 lines, by 1 inch 2 lines.

76.—C. Œnas.—*Stock Dove.*

This bird is rare in our western counties, the eggs are deposited in hollows in trees, shewing a preference for pollards, they are white, 1 inch 6½ lines by 1 inch 2 lines.

77.—C. livia.—*Rock Dove.*

Eggs of this bird are more pointed than those of its fellows, white, 1 inch 5 lines by 1 inch 2½ lines. The nest is formed in some crevice, on the face of a cliff, and usually beyond the reach of the hand.

78.—C. turtur.—*Turtle Dove.*

Eggs white and pointed, 1 inch 2½ lines by 11 lines, builds generally in the oak in June.

PHASIANIDAE. PHASIANUS.

79.—Phasianus Cholchicus.—*Pheasant.*

On account of the semi-domestication of these birds, the eggs are subject to variation, both in size and colour, usually however they are olive brown, 1 inch 10 lines by 1 inch 5 lines.

TETRAONIDAE. TETRAO.

80.—Tetrao tetrix.—*Black Grouse.*

Eggs yellowish white, spotted and speckled with orange brown, 2 lines by 1 inch 5 lines.

PERDIX.

81.—Perdix cinerea.—*Common Partridge.*

Eggs of a uniform olive brown, 1 inch 5 lines by 1 inch ½ line.

82—P. rubra.—*Red-legged Partridge.*

Eggs of a yellowish white, spotted and speckled with reddish brown, 1 inch 7½ lines by 1 inch 3 lines.

COTURNIX.

83.—Coturnix dactylisonans.—*Common Quail.*

Eggs from seven to twelve in number; of a yellowish white, blotched and speckled with umber brown.

GRALLATORES.

CHARADRIIDAE. CHARADRIUS.

84.—Charadrius hiaticula.—*Ringed Plover.*

This bird deposits its eggs on the bare shingle on our coasts, from which, owing to their peculiar colour, it is extremely difficult to distinguish them; they are of a pale cream colour, spotted with ash blue and black, 1 inch 5 lines by 1½ inch.

VANELLUS.

85.—Vanellus cristatus.—*Lapwing.*

Eggs four, ground colour olive, spotted and blotched with blackish brown, 1 inch 11 lines by 1 inch 4 lines.

HŒMATOPUS.

86.—Hœmatopus ostralegus.—*Oyster-catcher or Sea Pie.*

Eggs of a yellowish stone colour, spotted with ash grey and dark brown, 2 inches 2 lines by 1 inch 6 lines.

ARDEIDAE. ARDEA.

87.—Ardea cinerea.—*Common Heron.*

There are, I believe, two heronries in this county, one at Brockley Woods, and the other at Picton. The eggs are of a uniform sea green, 2 inches 3 lines by 1 inch 9 lines.

An interesting illustration of the affection of the white stork for its progeny may be inserted here. At the conflagration at Delft a pair of these birds, whose nest was on the summit of one of the burning houses, made numerous but unavailing efforts to bear away their young ones, but being unable to succeed, forgetful of former and future offspring, they remained on the nest till both it and themselves were consumed.

SCOLOPACIDAE. TOTANUS.

88.—Totanus Hypoleucus.—*Common Sandpiper, or Summer Snipe.*

The nest of these birds is very difficult to find, and it is a curious fact, that when it contains eggs, the female, if disturbed, quits it in silence, avoiding observation, but when there are young ones, she on the contrary tries every means to court attention, feigning to be unable to fly, screaming, and even rolling on the ground. They breed in holes in river banks. The eggs are four, reddish white, spotted and speckled with amber brown, 1 inch 4 lines by 1 inch.

SCOLOPAX.

89.—Scolopax rusticola.—*Woodcock.*

A pair or two of these birds yearly build in this county. Young birds have been seen in July by the keeper of the Right Hon. H. Labouchere. The eggs are of a pale yellow, blotched and spotted over the large end with ash grey, and various shades of yellow brown, 1 inch 9 lines by 1 inch 4 lines.

90.—S. gallinago.—*Common Snipe.*

The eggs of this bird equal in size those of the rook, a bird of three times its weight. They are pear-shaped,

as are eggs of most of the wading birds; 1 inch 6 lines by 1 inch 1 line, of a greenish white, the large end spotted with two or three shades of brown.

TRINGA.

91.—Tringa maritima.—*Purple Sandpiper.*

This bird till within the last few years, bred on the little island of Birnbeck, at Weston-super-Mare, but I fear does so no longer; at least neither rewards nor ardent search have been able to procure them; the eggs are 1 inch 6½ lines by 1 inch, in colour yellowish grey, irregularly spotted with pale brown.

RALLIDAE. CREX.

92.—Crex pratensis.—*Landrail.*

This bird breeds in June, laying from seven to ten eggs, of a reddish white, spotted with grey and brown, 1 inch 6 lines by 1 inch 1 line.

RALLUS.

93.—Rallus aquaticus.—*Water-rail.*

Though well known as a species, going by the provincial name of skitty, this bird is by no means common, and consequently the eggs are rare; they much resemble those of the landrail, but smaller, being 1 inch 4 lines by 1 inch; cream coloured, speckled with ash grey and reddish brown.

GALLINULA.

94.—Gallinula chloropa.—*Water Hen.*

Eggs reddish white, spotted and speckled with orange brown, 1 inch 8 lines by 1 inch 3½ lines.

LOBIPEDIDAE. FULICA.

95.—Fulica atra.—*Coot.*

Eggs 2 inches 1 line by 1 inch 6 lines, of a stone colour, speckled with pale brown.

NATATORES.

ANATIDAE. TADORNA.

96.—Tadorna vulpanser.—*Shelldrake.*

This bird breeds annually in various cliffs on our coasts, laying ten or twelve eggs, 2 inches 9 lines by 1 inch 11 lines, of a smooth shining white.

COLYMBIDAE. PODICEPS.

97.—Podiceps minor.—*Dabchick.*

Eggs white when first laid, but soon becoming stained with various colours, from contact with decayed rushes and other herbage, 1 inch 7 lines by 1 inch 3 lines.

ALCADAE. URIA.

98.—Uria troile.—*Common Guillemot.*

This bird lays a single egg of a large size, and very variable and beautiful colours, commonly of a fine blue or green, blotched and streaked with very dark brown, pear shaped, 3¼ inches by 1 inches 11 lines.

99.—U. grylle.—*Black Guillemot.*

These birds are scarce at all seasons, and only occasionally remain to breed; the eggs are greenish white, blotched and spotted with grey, brown and black, 2 inches 3 lines by 1½ inch.

ALCA.

100.—Alca torda.—*Razor bill.*

Though this bird closely resembles the common guillemot, in habits and general appearance, yet the distinction of their eggs is very obvious; they want the beautiful tint, and the elegant shape of those of the last mentioned bird; they are white, blotched and spotted with reddish brown and black, 2¾ inches by 1 inch 10 lines.

PELICANIDAE. PHALACROCORAX.

101.—Phalacrocorax carbo.—*Common Cormorant.*

A few of these birds breed on some of the islands in the Bristol channel. They produce five or six eggs, 2 inches 9 lines by 1 inch 7 lines, of a pale skimmed milk blue, covered with a white chalky substance which may be easily scraped off.

102.—P. cristatus.—*Shag or Green Cormorant.*

Eggs as those of the preceding, but differing in size, being only 2 inches 5 lines by 1 inch 5 lines.

LARIDAE. STERNA.

103.—Sterna hirundo.—*Common Tern.*

Eggs of yellowish stone colour, blotched and spotted with ash grey and dark brown, 1 inch 8 lines by 1 inch 2 lines.

104.—S. arctica.—*Arctic Tern.*

Eggs precisely similar to those of the preceding bird except in size, these being 1 inch 7 lines by 1 inch 1 line.

LARUS.

105.—Larus ridibundus.—*Black-headed Gull.*

Eggs extremely variable, in shape, size and colour; collected for food in various parts of England, especially at Scoulton Mere, in Norfolk.

106.—L. rissa.—*Kittiwake.*

The eggs of this common bird are three in number, of a stone colour, thickly spotted with grey and light brown, $2\frac{1}{2}$ inches by 1 inch 7 lines.

107.—L. canus.—*Common Gull.*

Eggs of a dark blue brown, spotted with darker brown and black, $2\frac{1}{4}$ inches by 1 inch $1\frac{1}{2}$ line.

108.—L. argentatus.—*Herring Gull.*

Breeds annually, though I fear in decreasing numbers, on the Steep Holmes, eggs hardly to be distinguished from those of the lesser black-backed gull, the egg of which however has the larger spots of the two.

109.—L. fuscus.—*Lesser Black-backed Gull.*

This species breeds also on the Holmes; the eggs are greyish brown, spotted and blotched with darker, $2\frac{3}{4}$ inches by 2 inches in breadth.

Appendix.

SCULPTURES OF WELLS CATHEDRAL,

See Proceedings, page 58, Note †

THE committee have the agreeable task of announcing that the restoration of the figure of King Edward the Elder, (the fall of which is mentioned in the account of the proceedings at Wells, page 55, *et seq.*), has been undertaken by Mr. Markland, with the consent of the chapter. He has committed the work to Mr. Richardson, the able artist who so well restored the sculptures of the Temple Church, London, and whose work may be seen, on a smaller scale, in the restored sculptures on the spandrils of the west door of St. Mary's Church, Taunton. The fragments have been collected and cramped together; the larger missing details will be moulded by the artist. Both the restorer and the sculptor were most desirous that, if not found impracticable, *the figure itself* should be replaced. A copy, however skilfully executed, would have been an unsatisfactory substitute.

Mr. Richardson, after a minute examination of the lower remaining statues, states that they much exceeded his expectation, and that their details are full of interest. He adds that the whole series may be restored at a moderate expense.

The committee trust that Mr. Markland may have the gratification of seeing the work which he has so nobly commenced, taken up in a kindred spirit, and carried on to the complete restoration of one of the most magnificent works that can be found in this or any country.

DOCUMENTS REFERRED TO IN REV. D. M. CLERK'S PAPER, PAGE 81.

No. 1.

Extracted from the Register preserved in the Library at Lambeth Palace, entituled Chicheley, page 378.

Nicholaus Bubwith Bathoniensis et Wellensis Episcopus.

In nomine sanctæ et individue Trinitatis, Patris et Filii et Spiritus Sancti, Amen. Quinto die mensis Octobris anno Domini millesimo quadringesimo vicesimo quarto, et nostre translationis ad ecclesias Bathoniensis et Wellensis anno decimo septimo. Ego Nicholaus Bubwith, permissione divina Bathoniensis et Wellensis episcopus, compos mentis, laudetur altissimus, licet eger corpore, videns mihi mortis periculum imminere, diem tamen sive horam mortis ignorans, condo testamentum meum in hunc modum. In primis lego et commendo animam meam Deo omnipotenti Creatori meo et corpus meum ad sepeliendum in ecclesia cathedrali Sancti Andree Wellensis, videlicet, in sepulcro facto subtus capellam quam ibidem fieri feci pro cantariis certorum capellanorum inibi pro anima mea et animabus parentum et benefactorum meorum per Dei gratiam pro perpetuo divina celebraturorum, juxta ordinationem meam sive executorum meorum. Item lego mille marcas fideliter applicandas et exponendas pro constructione et nova edificatione cujusdam librarie de novo edificande super paginam sive partem orientalem claustri dicte ecclesie Wellensis, inter hostium australe ejusdem ecclesie prope cameram exactoris ipsius ecclesie situatam et portam qua itur directe a dicta ecclesia per claustrum predictum in palatium episcopale, ac pro constructione, edificatione, completione et perfectione campanilis sive turris borealis ad occidentalem finem prefate ecclesie, inibi per Dei gratiam perficiende ad similitudinem in omnibus possibilibus turris australis ibidem vocati Harewelstoure, sub hac tamen conditione quod capitulum dicte ecclesie solvat realiter ad opera predicta, sic ut prefertur edificanda et perficienda, trecentas marcas quas mihi concessit et dedit ad

opera predicta* solvendas et finibus trium primorum et proximorum futurorum residentiarorum dicte ecclesie de et pro eorum residentiis ibidem faciendis, ita quoque quod, dicta libraria completa et perfecta, prefata turris borealis statim incipiatur et per Dei gratiam deinde perficiatur et compleatur, voceturque et nuncupetur Bubwithstoure.†

In cujus rei testimonium sigillum meum presentibus est appensum, his testibus, magistro Willielmo Skelton preposito et Johanne Stone canonicis Wellensis, Dominis Ricardo Mason, rectore de Loxton, et Johanne Dralane, rectore de Kyne Wardeston, Johanne Anstell et Thoma Greneham armigeris, Thoma Fermor, Johanne Whitle, Roberto Gunnry, et Rogero Told, Valettis. Datum in manerio meo de Woky quo ad sigilli mei appositionem undecimo die mensis Octobris anno supradicto.

Proved November 7th 1424.

No. 2.

Extract from the Instruction of Storthwaite's Chantry dated A.D. 1451. *Lib. Rub. page* 306.

Invocata Beatissme Trinitatis gratia, quæ universorum est principium, in cujus honore sanctissimeque virginis Marie et omnium electorum Dei, erigitur de dono celesti, cantaria, ad altare sancte Crucis in parte boreali Cathedralis eccles: Wells situatum, que quidem cantaria sancti Salvatoris, beate virginis et omn: electorum Dei nuncupata est, in qua: missarum officia, per gratiam Salvatoris, indies a modo disponendi dici, fieri, et celebrari in honore Summe Trinitatis, beatissime virginis Marie, et pro salute vivorum et remedio defunctorum, juxta modum ordinationem et statuta inferius annotata. Unde sancte matris ecclesie filiis

* Query, whether "opera predicta" were Harewell's Tower, at the south-west, or the tower he now leaves money to build at the north-west corner?

† The north-west tower was evidently not begun till after Bishop Bubwith's death. The money furnished by the Canons must therefore have had reference to the south-west tower which Bishop Bubwith had in his life time been engaged in building IN MEMORIAM for Bishop Harewell.

universis scripturas sequentes educacionis, et earum contenta, visuris vel audituris Johannes Storthwaith eccles: Cath : Well : Cancellarius humilis et insufficiens ac ejusdem eccles : canonicus indignus in sui recommendacione sinceram et continuam in Domini caritatem, &c.

No. 3.

Extract from the Will of Bishop Harewell, preserved in a Register in the Library at Lambeth Palace, entituled Courteney, 1381.—*page* 218.

Residuum vero bonorum meorum lego executoribus meis infrascriptis, ad celebrare faciendum et distribuendum pro anima mea juxta dispositionem eorundem.

The will is of some length, but contains nothing beside this, which can be supposed to relate to the Cathedral buildings. I would venture to suggest, that a portion of this residue was applied, by the bishop's executors, to the building of the south-west tower, perhaps under the conditions mentioned by Godwin, and to which I conceive allusion is made in the will of Bishop Bubwith. I cannot help believing that the south-west tower was built by Bishop Bubwith, perhaps in memory of his predecessor, and in part with his predecessor's money. If this was the case, there is a plain reason why the good bishop should express a desire that the north west tower (to be built after his death) should be exactly like the south west. It was a child of his own.

No. 4.

British Museum, Harleian MS. 1682. *Statutes of Wells Cathedral.*

On the third leaf begins the "De officio Thesaurarii," principally about the candles, "cerei" that were to be lighted on various occasions; after about a page "Ad omnes privatas missas ad

altare utrumque Sancti Stephani, Sancti Johannis, et ad missam in capitulo, quando cantatur alias quam ad majus altare, debent accendi duo cerei de iiij *libris* (?) et ardere usque ad finem missæ." After stating how long the lights were to burn,—"videlicet in his festis, in utroque festo sanctæ crucis, ad altare sanctæ crucis, in festis sanctæ Mariæ Magdalenæ, beatæ Katherinæ, Margaretæ et Ceciliæ, ad altare eorum. In utroque festo sancti Johannis evangelistæ, ad altare ejusdem. In festis sanctorum, Laurencii Vincencii, Thomæ martyris et Quintini, ad altare eorundem. In festis sanctorum Panoraeii, Kalixti, Dionisii, Eustachii, ad altare eorum. In festis sanctorum Martini, Dunstani, Gregorii et Edwardi, ad altare eorum. Omnes autem cerei, ceroferarei et ille quos debent quinque personæ" (dignitaries) "portare ad processionem ad altaria Sancti Stephani et Johannis ad natalem debent esse de libra."

Can any one kindly give information where the copy of the Tract of the Canon of Wells, used by Wharton, is? it differs from that in the Liber Albus.

F. MAY, PRINTER, HIGH STREET, TAUNTON.

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1851.

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The President, Vice-Presidents, Treasurers and Secretaries are *ex-officio* members of the Committee.

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Rules.

THIS Society shall be denominated "THE SOMERSETSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY;" and its objects shall be, the cultivation of, and collecting information on, Archæology and Natural History, in their various branches, but more particularly in connection with the County of Somerset.

2. The Society shall consist of a Patron, elected for life; a President, elected for three years; Vice Presidents; General and District or Local Secretaries; and a Treasurer; elected at each Anniversary Meeting; with a Committee of twelve, six of whom shall go out annually by rotation, but may be re-elected.—No person shall be elected on the Committee until he shall have been six months a Member of the Society.

3. Anniversary General Meetings shall be held for the purpose of electing the Officers, of receiving the Report of the Committee for the past year, and of transacting all other necessary business, at such time and place as the Committee shall appoint; of which Meetings three weeks notice shall be given to the Members.

4. There shall also be a General Meeting, fixed by the Committee, for the purpose of receiving Reports, reading Papers, and transacting business.—All Members shall have the privilege of introducing one friend to the Anniversary and General Meetings.

5. The Committee is empowered to call special Meetings of the Society, upon receiving a requisition signed by ten Members.—Three weeks notice of such Special Meeting and its object shall be given to each Member.

6. The affairs of the Society shall be directed by the Committee, (of which the officers of the Society shall be ex-officio Members) which shall hold Monthly Meetings for receiving Reports from the Secretaries and Sub-committees, and for transacting other necessary business; five of the Committee shall be a quorum.—Members may attend the Monthly Committee Meetings, after the official business has been transacted.

7. The Chairman at Meetings of the Society, shall have a casting vote in addition to his vote as a Member.

8. One (at least) of the Secretaries shall attend each Meeting, and shall keep a record of its proceedings.—All manuscripts and Communications, and the other property of the Society shall be under the charge of the Secretaries.

9. Candidates for admission as Members shall be proposed by two Members at any of the General or Committee Meetings, and the election shall be determined by ballot at the next General Meeting; three-fourths of the Members present balloting, shall elect.—The rules of the Society shall be subscribed by every person becoming a Member.

10. Ladies shall be eligible as Members of the Society without ballot, being proposed by two members, and approved by the majority of the Meeting.

11. Each Member shall pay ten shillings on admission to the Society, and ten shillings as an Annual Subscription, which shall become due on the first of January in each year; and shall be paid in advance.

12. Donors of Ten Guineas or upwards shall be Members for life.

13. At General Meetings of the Society the Committee may recommend persons to be ballotted for as Honorary or Corresponding Members.

14. When any office shall become vacant, or any new appointment shall be requisite, the Committee shall have power to fill up the same; such appointments shall remain in force only till the next General Meeting, when they shall be either confirmed or annulled.

15. The Treasurer shall receive all Subscriptions and Donations made to the Society, and shall pay all accounts passed by the Committee; he shall keep a book of receipts and payments, which he shall produce whenever the Committee shall require it; the Accounts shall be audited previously to the Anniversary Meeting, by two Members of the Committee chosen for that purpose, and an abstract of them shall be read at that Meeting.

16. No change shall be made in the Laws of the Society except at a General or Special Meeting, at which twelve Members at least shall be present.—Of the proposed change a month's notice shall be given to the Secretaries, who shall communicate the same to each Member three weeks before the Meeting.

17. Papers read at Meetings of the Society, and considered by the Committee of sufficient interest for publication, shall be forwarded (with the Author's consent) to such Periodical as shall be determined by the Committee to be the best for the purpose, with a request that a number of such papers may be printed separately, for distribution to the Members of the Society, either gratuitously or for such payment as may be agreed on.

18. No religious or political discussions shall be permitted at Meetings of the Society.

19. That any person contributing Books or Specimens to the Museum shall be at liberty to resume possession of them in the event of the property of the Society ever being sold or transferred to any other county. Also persons shall have liberty to deposit Books or Specimens for a specific time only.

N. B. One of the objects of the Society shall be to collect, by donation or purchase, a Library and Museum, more particularly illustrating the History, Natural, Civil, and Ecclesiastical, of the County of Somerset.

*** *It is requested that Contributions to the Museum or Library, be sent to the Curator, at the Society's rooms, Taunton.*

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SOMERSETSHIRE

Archæological and Natural History Society.

PROCEEDINGS

DURING THE YEAR

1851.

TAUNTON:
FREDERICK MAY, HIGH STREET.
LONDON: GEORGE BELL, 186, FLEET STREET.

1852.

SOMERSETSHIRE

Archæological

and

Natural History Society.

PROCEEDINGS.

1851.

The First Volume of the

PROCEEDINGS OF THE SOMERSETSHIRE ARCHÆOLOGICAL AND NATURAL HISTORY SOCIETY, at the General, Quarterly and Annual Meetings, held during the years 1849 and 1850; with the Papers read at the Meetings, &c. &c. and Sixteen Illustrations, can be had of the Publisher or any Bookseller, at *6s. 6d.* sewed, or bound in cloth, *8s.*

CONTENTS.—PART 1. PROCEEDINGS, &c. First Annual Meeting. President's Address. Secretary's Report. Dr. Buckland's Address. Museum. First Quarterly Meeting. Roman Remains at Coombe St. Nicholas. Ashill and Thurlbeer Churches. Inscription on Church Bell, at Staple Fitzpaine. Second Quarterly Meeting. Anglo-Saxon and Norman Architecture. British Gold Ring Money. Third Quarterly Meeting. St. Peter's Church, Frome. King Alfred's Strategy. Ashen Fagot. Excursion. Roman Remains at Whatley. Letter of Rev. J. Skinner. Museum. Second Annual Meeting. Address of the Bishop of Bath and Wells. Secretary's Report. Treasurer's Report. Marl Pits of Somersetshire. Dr. Markland's Address. Sculptures of Wells Cathedral. Professor Cockerell's Communication. Archdeacon Brymer's Address. Sculptures in St. Cuthbert's Church, Wells. Ancient Frescoes in Netherbury Church, Dorset. Excursion to Glastonbury. Museum. Excursion to Hambdon Hill, and Montacute. Queries relating to the Churches, Archæology, and Botany of Somerset.

PART II. PAPERS. Uphill Old Church, by Rev. F. Warre. Coins from Somersetshire Mints, by Rev. T. F. Dymock. Sculptures in Wellington Church, by Mr. C. E. Giles. Ancient Earthwork at Norton, by Rev. F. Warre. Turbaries between Glaston and the Sea, by Mr. Stradling. Bridgwater High Cross; and Old Bridge, by Mr. W. Baker. Wells Cathedral, by Rev. D. M. Clerk. Sculptures in St. Mary's Church, Taunton; Old Doorway, at Frome; and Nunney Castle, by Mr. C. E. Giles. Glastonbury Abbey, by Rev. F. Warre. Geology of Somerset; and Somersetshire Fauna, by Mr W. Baker. Bird's Eggs found in Somersetshire, by Mr. W. D. Crotch. APPENDIX.

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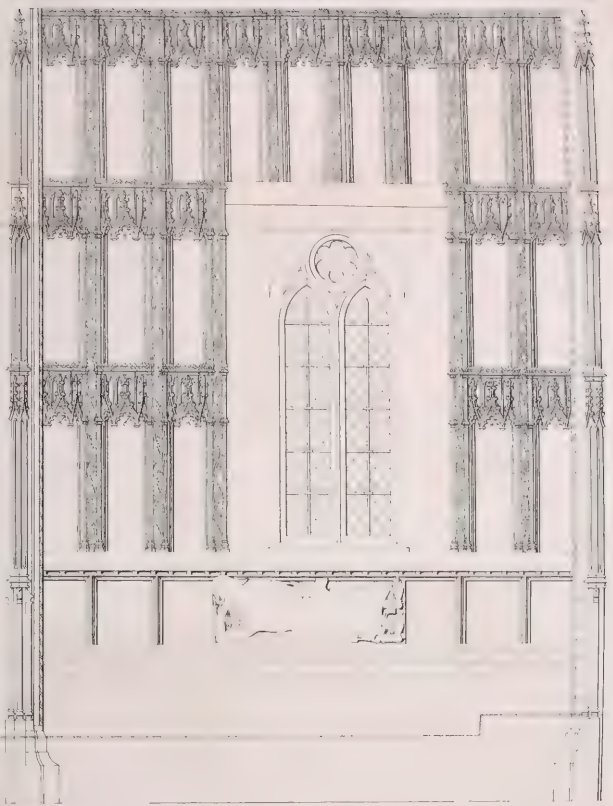

ELEVATION OF REREDOS
AT EAST END OF TANNERS CHAPEL
ST CUTHBERT'S CHURCH, WELLS, SOMERSET.

SCALE OF

SOMERSETSHIRE

Archæological and Natural History Society.

PROCEEDINGS

DURING THE YEAR

1851.

TAUNTON:
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1852.

The purchase of the Geological Collection of the late Rev. D. Williams having been recommended in the First Volume of the Proceedings, the Committee have great pleasure in informing the Society that a sufficient sum has been subscribed for that purpose, and that the Collection is now deposited in the Museum at Taunton.

The Society is indebted to the courtesy of B. Ferrey, Esq. and E. A. Freeman, Esq. for the illustrations of Wrington Church, and of the Sculptures in St. Cuthbert's Church, Wells, given in the present Volume.

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THIRD ANNUAL MEETING

OF THE

Somersetshire Archæological and Natural History Society,

Held at Weston-super-Mare, September, 16th, 1851.

THOMAS TUTTON KNYFTON, ESQ. HIGH SHERIFF OF THE COUNTY, IN THE CHAIR.

THE business commenced on Tuesday morning at eleven o'clock, when the members assembled in the large and commodious National School Room, which had been kindly placed at the service of the Society by the Ven. Archdeacon Law, rector of the parish.

The Vice-Presidents, Treasurers, general Secretaries, and the district or local Secretaries, were severally re-appointed. The following gentlemen were also elected as Vice-Presidents:—The Rev. J. T. Law, T. T. Knyfton, Esq. Lord Talbot de Malahide, W. H. P. Gore Langton, Esq. M.P. J. H. Smyth Pigott, Esq. and F. H. Synge, Esq. The following gentlemen were ballotted for, and elected as honorary and corresponding members:—The Rev. T. F. Dymock, E. A. Freeman, Esq. the Rev. Joseph Hunter, the Rev. Richard Warner, W. Yarrell, Esq. Charles Empson, Esq. and W. Tyson, Esq. The gentle-

men appointed as local Secretaries were J. H. Pring, Esq. M.D. and the Rev. C. P. Parish. H. C. Trenchard, Esq. and the Rev. H. Parr, were elected new members of the Committee. The names of sixty-four new members were also added to the roll of the Society.

After the conclusion of the formal business, the meeting was adjourned till one o'clock, when the chairman opened the proceedings in a brief and appropriate address. He directed the attention of such as wished to visit some of the objects of archæological interest in the vicinity, to a few within reach. The first place he would mention was Churchill, about ten miles distant, where, on a bold ridge of the Mendip Hills, was to be seen a remarkably fine Roman encampment. Many were aware that at Cheddar there was a fine stream of water, which gushed from the base of the cliffs. At some few miles from the spot, amongst the Mendips, was what was termed a "swallet hole," into which flowed a stream of similar volume, and it had been surmised that this stream was the one which found its vent at Cheddar. That supposition was now confirmed. A mining company had recently been established on the hills, whose refuse materials sometimes discoloured the water of the engulphed stream, and the same water now found its way, in its discoloured state, to the stream at Cheddar. At Wrington was still standing the house in which John Locke was born, though it derived its interest solely from this circumstance, and was little worth looking at as a building ; near it however was the very fine old parish church, which was well worthy of a visit. Adjoining to Wrington, was the fine old church of Yatton ; and there was also a church of much interest at Christon, a very small structure, and supposed to be one of the oldest in Somerset. On the part of the inhabitants of this neigh-

bourhood he begged to thank the Society for having chosen this place for holding their present anniversary meeting.

The Rev. F. WARRE, one of the honorary secretaries, announced that a letter had been received by Dr. Pring, the local honorary secretary, from the Duke of Northumberland, expressing his grace's regret at being unable to attend the meeting of the Society.

Mr. C. E. GILES then read the following report;—

"Your Committee, in presenting their Annual Report, would beg to inform you that their principal undertaking during the past year, has been the arrangement and publication of the first volume of the Society's Proceedings. As this volume comprises a period of nearly two years, it is of an unusually large size, and has been a work of some considerable labor; involving, moreover, a large outlay of your funds. But your Committee believe that this outlay has been fully justified, as well by the new and interesting matter which the volume contains, as by the prospective advantage to the Society in the increase of its members, through making its operations more generally known. For any errors or imperfections in the details of this work, your Committee would hope that a kind allowance may be made; as the task of editorship, and the difficulties attending publication, require an amount of experience, to which the members of your Committee have hitherto been able to lay no claim. The volume (as you are aware,) has been presented GRATIS to all who were members of the Society at the time of its publication; the remaining copies have been purchased by the publisher, of whom they may be had at 6s. 6d. each. Your Committee venture to hope that the future state of your

funds will admit of the publication of a similar volume from time to time, of good type and character, but of smaller dimensions, and at a more moderate cost."

"A serious loss to the Society's funds, as well as much inconvenience to persons wishing to become members, has accrued from Rule IX, restricting their election to *General* Meetings; and your Committee have, in consequence, proposed to amend the said rule, so as to secure to candidates the earliest possible admission."

"Agreeably with an alteration made in Rule IV, at our last Anniversary Meeting, arrangements were made for holding a General Meeting in the Spring and the Autumn of the present year; but your Committee having learnt that very many influential members would be absent from the county during the Spring, found it necessary to limit the business of that meeting to the election of members, and to the transaction of other matters of routine."

"In compliance with the request of many persons resident in and around Taunton, a series of monthly evening *Conversazioni*, confined to the subjects embraced by the Society, was held in the Museum during the last winter. But it is our duty to state that no portion of the funds of the Society was appropriated towards the expenses of these meetings; a small entrance fee being found more than sufficient to cover all the necessary outlay. These meetings appeared to awaken an interest in the Society's proceedings; and under these circumstances, the Committee propose to commence a second series in the course of next month, of which due notice will be given to each member."

"The Museum has received donations and deposits of several objects of interest during the year; among which should be mentioned the following:—A valuable specimen of Tessellated Pavement found at East Coker, presented by

C. J. Helyar, Esq. A very fine collection of Rubbings from Brasses, deposited by the Rev. H. Alford, of Wymeswold. Several very fine Rubbings, by the Rev. E. C. K. Bearcroft. Several interesting Implements found in the shafts of mines worked by the Romans, below Quantock, by the Rev. F. Warre."

"As the Society is unable, at present, to devote any considerable sums to the purchase of specimens, your Committee would respectfully invite collectors to render their assistance; and beg to call attention to Rule XIX, regulating loans."

"Your Committee has entered into correspondence with the Architectural Society of Northamptonshire, and the Archaeological Society of Sussex, upon the invitation of those bodies."

"The assembling of the Archaeological Institute of Great Britain and Ireland, at Bristol in July, cannot have failed to excite a general interest in our pursuits. Many of our members attended its sectional meetings, and some were able to assist them with communications of interest. Your Committee deem it due to the able officers of that most important body, to acknowledge their readiness at all times to co-operate with our Society, and to aid us in our local efforts, from the stores of information at their command. Your Committee would call especial attention to the able lectures on Wells Cathedral, delivered by Professors Willis and Cockerell, and to a valuable recent publication by the latter gentleman, illustrating the sculptures of the West front of that venerable pile."

"The number of members on the Society's books for the present year amounts to 339, and your Committee in concluding this brief report, has the pleasing task of congratulating the Society, as well on its generally flourishing

condition, as on its increasing usefulness for the purposes for which it was established."

Mr. BADCOCK, the treasurer, presented his report, an abstract of which is subjoined, viz.:—

The Treasurer in Account with the Somersetshire Archæological and Natural History Society.

Dr.				Cr.			
1851.	£	s.	d.	1851.	£	s.	d.
Balance of former account -	74	16	10	Curator's Salary - - -	25	0	0
Subscriptions, donations, &c.	267	14	4	Rent of Museum Room - -	26	0	0
				Printing, Plates, &c. first Vol. of Proceedings - - -	226	5	7
				Books, Maps, &c. &c. - -	49	12	4
				Stationery, &c. - - -	13	8	8
				Balance - - - - -	3	5	7
	£342	11	2		£342	11	2

R. G. BADCOCK, Treasurer.

Mr. MILES, M.P. in moving the adoption of the report, expressed his conviction that an increased interest had been aroused in the county by the recent meeting of the Archæological Institute, at Bristol. He was happy to find that the utmost economy prevailed in the management of the funds of the Society.

Mr. DICKINSON seconded the motion.

The first Paper was by Mr. E. DAVIS, on the Abbey Church of Bath. At the outset he remarked that many accounts had been written of the Abbey, all of them speaking in the highest terms of the beauty of its design, but agreeing also in the faultiness of the details and the clumsiness of the work. He looked on the building, however, in a different light. He did not consider it as an example of the perpendicular, but as the herald of a new style. At the beginning of the sixteenth century, about which time the Abbey was designed, the literature and art

of other nations were very generally studied in England, and the traveller came home with a growing admiration of the monuments of Rome. In the design of the Bath Abbey, it was evident that the architect was alive to the follies of the day, and endeavoured to avoid them. His aim was to avoid the perpendicular lines and the angles then so much praised ; and the appearance of poverty in the building was the result, not of that design, but of the smallness of his funds. The arches of the nave and choir were elegant, without extreme lightness ; and beauty, not monotony, was the result. The roof appeared to derive support from invisible means, and was a model of grace, elegance, and lightness. The merit of the design of the church could not be doubted ; the cleverness of its construction had always been allowed; and he was at a loss to see why rudeness of workmanship had been imputed to it. It was the commencement of a new style, and having the building before them, all united in praising its general effect.

A paper was then read by Mr. FREEMAN on the Perpendicular Churches of Somerset, which is given in full in Part II.

MR. DICKINSON, in moving a vote of thanks to Mr. Freeman and Mr. Davis, thought it necessary to state that there were some points in Mr. Freeman's paper, as his preference for the Perpendicular style, with which he did not himself agree; as to his remarks on Mr. Ruskin, he thought it should be distinctly understood that Mr. Freeman's observations only expressed his individual opinions, and in no wise compromised the society as a body.

The Rev. MALCOLM CLERK took the opportunity of referring to some remarks made by Professor Willis in his lecture on Wells Cathedral, at the recent meeting of the Archaeological Institute. Mr. Willis had said,

that the west front could not have been built by Joceline Trotman. The reverend gentleman proceeded at some length to point out the grounds on which he came to an opposite conclusion.

1st. That he had not seen any *consecration deed* of the Bishop's, and did not know where such was to be found, but that the Liber Albus No. 2, favored as he supposed, his theory ; the date of the consecration of the church is there stated to be October 23, 1239 ; and if the church was not finished at the time of its consecration, there is no reason to suppose that the Bishop left off building as soon as it was consecrated.

2nd. A document in the Liber Albus No. 2, (and also in Wilkins,) which bore date the year of Joceline's death, (he believed A.D. 1342,) two years and half or more after the consecration, the purport of which is to assign revenues to the ministering priests, to his mind clearly spoke of this assignment of revenue as his last necessary act, in regard to his cathedral, *after having completed all else that was required for the due celebration of divine worship, &c.* which would hardly have been said, if he had left the west front a large blank, only protected from the air by some temporary construction.

3rd. The Canon of Wells, and also Godwin, both favoured his idea (in passages which he gave) that the west front, or rather all west of the choir, was *the* particular portion which bishop Trotman cared to build.

4th. The style of the architecture, by Mr. Willis's own confession, gave no token of late construction.

5th. If Bishop Joceline did not build the west front, the only person who could have built it, must have been one of the Buttons, as an inscription thereon (of which he presented a rubbing,) seemed to indicate.

The next paper was then read by the Rev. W. PHELPS, the well known Author of the History of Somerset, on West Britain previous to the Roman occupation.

The morning sitting was followed by the ORDINARY.

The Evening Meeting

Commenced at seven o'clock, when a large company assembled, the High Sheriff again presiding.

A paper was read by Mr .A. CROSSE, on Holwell Cavern, which is given in full in Part II.

The communication by Mr. Crosse was followed by a paper by the REV. W. CROTCH, on the Recent Plants and Shells of the Weston District.

The next communication was a paper by Mr. C. MOORE, on the "Aptychus," which is given in Part II.

Mr. DICKINSON moved a vote of thanks to the gentlemen who had favoured the meeting with their communications.

On the motion of the Rev. PREBENDARY CHILCOTT, the thanks of the meeting were voted by acclamation to the President, for his able conduct in the chair.

Mr. KNYFTON, having acknowledged the compliment in suitable terms, the meeting adjourned at eight o'clock.

Second Day.

Wednesday, September 17th.

THE proceedings were resumed at ten o'clock, when the High Sheriff again took the chair.

A paper was read by Mr. BAKER, on the Geological formation of the neighbourhood, which we trust to be able to give in a future volume ; after which

The Rev. F. WARRE read a paper on the British Camp on Worle Hill, which is given in Part II.

The Rev. W. PHELPS having given the second portion of his paper on West Britain, the meeting dissolved, and carriages having been provided, a numerous party proceeded on the EXCURSION. See page 16.

The Museum.

AMONG the very many objects deposited in the temporary museum, to the amusement and gratification of the meeting, the following are more particularly worthy of mention, contributed by

The Corporation of Axbridge.—Records and documents from the corporation chest of the ancient borough of Axbridge, some of which bear date eight centuries back, and make reference to a period when the forest of "Mynedeep" was a hunting chase of the Kings of England.

Mr. J. H. Smyth Pigott.—A large and beautifully formed bronze head of Diana, dug up at Bath, about a century ago. A bronze Cupid, dug up at Bath. A bronze Gladiator, formerly belonging to Chas. I. A bronze from Pompeii,—the sister of Trajan as Diana. A large and beautifully executed drawing, in water colours, by Stephanhoof, entitled the "Phases of Art," exhibiting the gradual development of painting, sculpture, and architecture, in a series from the Hindoo to the Grecian. A very handsome silver casket, designed by Raphael, executed by Cellini. It was presented to Horace Walpole, by Sir H. Mann, and was originally in the possession of the Grand Duke of Tuscany. The "Speculum," or conjuring stone, of Dr. Dee. Valuable Roman Cameos. A portrait of Locke. Specimens of Roman and Greek coins. MSS. relating to Bristol to A.D. 1554. Buckler's views of churches and old houses in Somerset. Porta de la Fisonomia Huomo, a very curious and unique copy. Portraits of the Smyths and Pigotts. The Intelligencer, 1661 to 1662. A MS.

work of Dr. Faustus. Indian sword from the Strawberry Hill collection. A large and valuable collection of autograph letters of eminent men, including Byron, Scott, Pope, Sheridan, Voltaire, Rammohun Roy, De Lolme, Drake, Lord Hood, Rodney, Sir T. Lawrence, Canning, Burke, Frederick II. of Prussia, &c. &c.

The Rev. R. C. Hathway.—An interesting reliquary from Kewstoke Church—a sacerdotal figure about eighteen inches high, having in the back a niche, in which were the remains of a chalice, adhering to the bottom of which was a residuum of coagulated blood, supposed to be that of Thos. à Beckett.

The Rev. F. Lockey, Bath.—An ancient iron vessel, found imbedded in a mass of conglomerate, on the shore off Charmouth, with specimens of the conglomerate and contents of the vessel.

The Rev W. W. Rowley.—Cases of splendid Indian insects, butterflies, beetles, &c.

The Rev. R. Symes, Cadbury Lodge, Yatton.—A small bronze figure found in a Roman Encampment on the Blackdown hills, near Taunton.

The Rev. J. H. Yatman, Winscombe.—An antique picture frame, containing a neatly-executed and ingenious model of Bristol Cathedral, made in pith, and bearing date 1715.

Mrs. Housman, Bath.—Transfer of brilliantly-tinted flowers from Pompeii; this transfer was made by Sir Humphrey Davy, and presented by him to Sir Thomas Lawrence.

Mrs. Farquharson, of Montacute.—A highly-ornamented antique stirrup, found at Hamdon Hill. A monastic ring and locket, found at Montacute Priory, and fifteen Roman coins, found near Hamdon Hill.

Mrs. F. H. Synge.—A silver coin of the Saxon King, Edmund I.

Mrs. N. Smith, Clifton.—A beautiful cornelian ring found in the ancient camp on Brean Down.

Dr. J. H. Pring.—Electro-type casts of rare old coins, seals, and medallions. A beautiful specimen of arragonite from Holwell Cavern, in illustration of the paper read by Mr. Crosse.

Dr. Jos. Hume Spry, Bath.—A tile in pottery from the Alhambra, with inscription in Arabic. Small earthen vase from Pompeii. Chinese mariner's compass.

Dr. Tomkins.—Cases of British and Roman pottery, keys, daggers, spurs, &c. chiefly from Abingdon. East Indian matchlock, inlaid with ivory. Persian sword with enamelled scabbard.

Mr. J. Baker.—Rare antique gold, silver, and copper coins.

Mr. Castle, Worle.—Three Roman cameos, of Nero, Ti. Claudius, and Vitell. German. in fine preservation, found at Kewstoke. Two very ancient bridle bits, a spur, and brass stirrup. An iron breast-plate or cuirass, dug up in the parish of East Brent, in 1820. A beautifully wrought ancient two-edged sword and a bill hook, and an antique two-handled porcelain jar. Cases of ancient coins found at Worle. A very singularly-formed bird's nest, &c.

Mr. F. G. Dowty.—Views of Cheddar Cliffs, and King's Cliff, North Petherton. Portrait of Erasmus, by Holbein. 120 impressions in sulphur, of Somersetshire seals. Small pair of oval Italian landscapes, on copper, by Patol. Brass key, from Glastonbury Abbey.

Mr. J. Elton.—Arctic Tern, killed at Weston-super-Mare, in April, 1842. Honey Buzzard, killed at Bitton,

near Bristol. Moutagu's Harrier, killed in Hampshire, in 1838. Gadwall Shovellers, shot in St. Phillip's Marsh, Bristol, 1830. Snow Bunting, shot at Weston-super-Mare. Hawfinch, shot at Coombe, near Westbury-on-Trym, one on Redland Common, and another on Durdham Down, near Bristol.

Mr. Charles Empson, Bath.—Rubbings from brasses in Devonshire, Oxfordshire, and Somersetshire. Idols of gold, found in the lake of Guanatuvita, South America; and a portion of the golden armour of Montezuma. A very singular and large spiders-nest, with a curious spring-valve entrance, from the Greek Islands. Arctic plants, collected by Sir E. Parry.

Mr. B. Fry, Axbridge.—Fine specimens in Ornithology, neatly mounted with appropriate landscape back grounds, including among them one of the Alpine Swift, shot in this county.

Mr. Shrowl.—Fragments of an urn and of bones contained therein, found by the late Bishop of Bath and Wells, in a barrow, on Mendip, near the fosse road from Ilchester to Bath, one mile from Oakhill brewery. Ancient brass vase, inlaid with steel. Ancient brass snuffers, enamelled.

Mr. Colebrooke Stockdale, of Torquay.—Drawings of the churches and old mansions of Somerset, of the west front of Wells Cathedral, and of Long Leet.

Mr. W. Stradling.—Part of a very ancient altar pall, wrought in gold. Needle work of the time Chas. I.—"the Judgment of Solomon." Needlework embroidered with pearls, representing the restoration of Chas. II. Pair of gauntlets diapered with gold. Potsherds from a Roman pottery. Gun locks of the time of the Monmouth rebellion.

Two interesting cases of birds, Buntings, and Woodpeckers, procured on Clayhill Farm, Cannington, and set up by Mr. W. Tucker, of that place. A case of eight species of Bats, taken near Bridgwater. A case of Skeletons of Bats, Shrews, Moles, Newts, &c. One case of Coleoptera, viz. Curculionidæ and Carabidæ—150 species. Four cases of Lepidoptera, viz. Papilionidæ and Hisperiidæ—64 species ; Sphingidæ and Zygænidæ—21 species ; Bombycidæ and Arctiidæ—52 species. Two cases of Hymenoptera, containing more than 300 species. A tray of fresh-water, land, and sea Shells, Nuts, Beetles, &c. found under brick-clay, near Bridgwater, more than twenty feet deep. A tray of fresh-water, land, and sea Shells, collected from sand-banks at Chilton Trinity, Chedzoy, Westonzoyland, &c. all of both sets agreeing with recent species.

The Excursion.

ON reaching the point of the hill at Anchor Head, the party left the carriages and scaled the defences of the ancient camp. After a brief breathing time, they scoured through the camp, led to the important points of the fastness by the indefatigable writer of the able disquisition which had just been read, and whose thorough conversance with the details of the fortifications, so well qualified him for the post of a leader on the occasion. The party then crossed the hill on foot to Kew Steps. Here attention was called to a large but shallow pit on the open down, in which it was stated no water remained as in neighbouring hollows. It was surmised that an extensive cavity existed beneath it. After a short controversy as to the origin of the cylindrical furrows in a depression or excavation at the top of the pass, the party descended the steps; here their leader pointed out the remains of flanking masonry built with the evident intention of narrowing the pass, and terminating at a spot, which he indicated, with a strong gateway. Presumptive evidence was thus offered that the pass had been constructed for military purposes, and in times much more remote than hitherto surmised. At Kewstoke, the party were received by the Rev. R. C. HATHWAY, vicar, and after an inspection of the church, and its most interesting feature, the old Norman doorway, re-entered the carriages, and proceeded to the ancient Priory of Woodspring.

Here an elegant refection had been provided by Mrs. SMYTH PIGOTT, the possessor of the estate. That lady was herself present, and most courteously received the visitors in the dining hall. We may here mention that the regretted absence of Mr. PIGOTT, from the meetings of the Society, was occasioned by serious indisposition. At the ancient entrance gateway, a paper on the Priory was read by the Rev. F. WARRE. At the close of the reading the party visited in succession the cloisters, the tower, and the noble but dilapidated refectory, now occupied as a wagon-house. Standing near the refectory, the Rev. F. Warre read an interesting notice respecting an ancient reliquary found at Kewstoke Church, now in the Society's Museum, at Taunton.

"I cannot" said he, "leave the subject without mentioning the discovery of a very curious reliquary in Kewstoke Church, which is probably connected with the dedication of Woodspring Priory to St. Thomas of Canterbury. The weight of the clerestory having forced out the north wall, which was of 14th century work, a mutilated piece of carved work which was built into it, was removed when the wall was pulled down, and proved to be a reliquary. In the front is carved a figure in an arched niche having shafts of early English character. This figure, the face of which seems to have been purposely mutilated, holds something, probably a heart, in its hands, but it is so defaced that it is now quite impossible to decide. At the back was discovered an arched recess, within which was a small wooden cup, containing what was supposed to be human blood. Now this reliquary was manifestly of earlier date than the wall into which it was built, and appears from the capitals of its shafts, nearly to correspond in style with that in use about the time of the dedication of Wood-

spring. The opinion of the Archaeological Institute of Great Britain and Ireland, to which it was submitted, was, that it probably contained the most valued relic possessed by the Priory—probably some of the blood of Thomas à Becket; and that the monks, foreseeing the desecration of their conventual church, had deposited it in the parish church of Kewstoke, hoping by that means to preserve from profanation a relique, in their eyes of the greatest sanctity, being no less than the blood of their murdered patron, St. Thomas of Canterbury."

From the Priory, the excursionists proceeded through a richly diversified country to the ancient and beautiful Church of Banwell, whose bells rung out a merry peal by way of welcome. Here in proximity to the lofty and handsome tower of the church, the company listened to an able disquisition on its architectural character and merits, from Mr. FREEMAN. They then visited the interior, where that gentleman continued his remarks.

On leaving the church, the party proceeded to the delightfully situated residence of CHANCELLOR LAW, where a collation had been munificently and with great elegance laid out, open to an unlimited number of guests, consisting of the members of the society and their friends. The beautiful grounds were thrown open to the visitors; and many of the more adventurous descended into the celebrated stalactite caves, which had been lighted up for the occasion.

The tables having been cleared, the company assembled round Mr. QUEKETT, to hear his paper on the structure and formation of Pearl, which the talent of the author and his eminent qualifications as a lecturer, rendered so interesting, that he was compelled a week or two afterwards, to yield to the pressing solicitations of the Committee, to repeat his lecture at the Society's Museum, at Taunton, to the great enjoyment of a numerous assembly of hearers.

In bringing the proceedings to a close, the High Sheriff, at the conclusion of Mr. Quekett's paper, took occasion on the part of the Society, to thank the Chancellor in the warmest terms for the handsome manner in which they had been entertained; their reception had been in every way worthy of his distinguished character for unbiassed hospitality, and for that kindness of feeling which had rendered him alike beloved and honoured by all classes amongst whom he moved.

The CHANCELLOR expressed the great pleasure and satisfaction he had enjoyed in receiving the Society, and in having taken some part with them in these interesting proceedings. After thanking Mr. Quekett, and passing a well merited eulogy on his able paper, he concluded by expressing a hope that on some future occasion the Society would again visit this neighbourhood, where a large unexplored field of great antiquarian interest still invited their further investigation, and that they would then afford him the gratification of again entertaining them on a more extended scale.

AT the Conversazione Evening Meetings of the Society held at the Museum, in Taunton, during the winter of 1850-51, Papers on the following subjects were read, viz.

1. On Ancient Defensive Armour, by the Rev. F. Warre.
2. On the Deposits of the River Parret, by Mr. W. Baker.
3. On British Shells, by the Rev. W. R. Crotch.
4. On Microscopic Fossils, by Mr. C. Moore.
5. On Street Architecture, by Mr. C. E. Giles.
6. On Female Costume during the Middle Ages, by the Rev. F. Warre.
7. On the Castle of Taunton, by Mr. W. F. Elliot.
8. On Male Costume during the Middle Ages, by the Rev. F. Warre.
9. On the Geology of the Somersetshire Coast, below the mouth of the Parret and Blue Anchor, by Mr. W. Baker.
10. On Ancient Music, by the Rev. W. R. Crotch.
11. On the Rise and Developement of Ecclesiastical Architecture, by the Rev. R. Mate.
12. On Ecclesiastical Vestments, by the Rev. F. Warre.

At one of the above meetings, Mr. Baker stated, that a specimen of Gold Ring Money, weighing 120 grains, had been recently discovered in the deposits of the River Parret, at Bridgwater, several feet below the surface. At a subsequent meeting, a letter to Mr. Baker from Mr. Albert Way, was read, on the subject of this discovery. Mr. Way observed that it was a remarkable fact, that the specimens of these rings were found in counties bordering on the coast, as in Sussex, Dorset, and in the present instance at Bridgwater.

PROCEEDINGS

OF THE

SOMERSETSHIRE ARCHÆOLOGICAL AND NATURAL HISTORY SOCIETY,

1851, PART II.

PAPERS, &c.

On the Distinction between Anglo-Saxon & Norman Architecture.

BY THE REV. F. WARRE.

BEFORE I begin to read this paper, it is right that I should inform my audience that it contains but very little original matter from beginning to end; and also beg them to believe that I have not the least idea of teaching, as if I myself were any authority on the subject. But circumstances having drawn my attention to the subject for some time past, I think it not impossible that the few hints I have put together, may assist others, who perhaps have not thought much about it, in discovering Anglo-Saxon work in their churches; and, by so doing, in perhaps casting light upon a very difficult and much-disputed point in the history of the ancient architecture of this

country. I should also say, that from want of a good library, I have not been able to verify some of my quotations; but they are taken from good authority, and are, I believe, correct.

The antiquaries of the last century, as well as those of the early part of the present, appear to have had but very vague ideas upon the subject of architecture. Even the learned Milner, whose fondness for Gothic buildings sometimes exposed him to the ridicule of the *virtuosi* of his day, who could see no beauty in anything which was not classical, considered every building in which the arches were not pointed, as Saxon; and though well aware that Walklyn built the transepts of Winchester Cathedral very shortly after the Conquest, was so little acquainted with the masonry of that time, as to suppose that he was also the builder of the tower of that cathedral, and speaks of them all, together with St. Cross —built by Henry de Blois, in the reign of Stephen—as Saxon edifices. Indeed, so little was the distinction of styles understood, that the celebrated Thomas Wharton, in his description of Winchester, confidently pronounces the work of Bishop Godfrey de Lucy, on the east side of the choir, to be prior to the date of Walklyn's work, though it is a very pure and beautiful, though early, specimen of the style in use in the thirteenth century, to which the well-known Rickman has given the name of early English; and I believe the vergers still show the crypts as Saxon work, in spite of the rather contradictory fact, satisfactorily proved by documentary evidence by Professor Willis, that the Norman Cathedral built by Walklyn did not occupy the same site as that on which the original edifice stood.

When, however, the study of our ancient buildings became more popular, and was carried on in a spirit of closer

and more critical investigation, a great reaction took place, and when I first turned my attention to the subject, nearly thirty years ago, the received opinion among architectural antiquaries was, that no building remained, any part of which could with certainty be pronounced to be of Saxon workmanship; and that even those fragments which might be of earlier date than the Norman Conquest, were identical in style with those which were certainly known to be of later date than that event.

This view of the matter was, however, soon modified by the results of closer observation. I well remember when, about five and twenty years since, I was so fortunate as to become acquainted with that justly celebrated architectural antiquary, Mr. William Twopenny—that his opinion was, that there was no Saxon building in existence; and that about two years afterwards, when I again had the pleasure of meeting him, he told me that his opinion was changed, for that he believed he had discovered in the quoins of some buildings, which he had supposed to be early Norman, a peculiarity which he thought might prove to be a characteristic of Saxon masonry. That peculiarity was the system of bonding, now technically known as long-and-short work. And later researches have brought to light several other peculiarities, which are now generally supposed to be indicative of erections prior to the Norman Conquest, or, at all events, of a style differing materially from that known to be Norman, which prevailed in this country from the latter part of the eleventh to the close of the twelfth century.

A few of the most striking of these peculiarities I will now endeavour to describe. Before, however, entering upon the peculiarities of any style of architecture, it will

not be out of place to shew that it is at least probable that the style was really distinct from any other, more particularly as the ridicule which has been heaped upon the credulity of antiquaries, has rendered those of the present day a very sceptical race—much more so, indeed, than appears to me to be consonant with right reason; for it is in vain to search for evidence about things which took place nearly a thousand years ago, as conclusive as would be required to prove a fact of the present time. Now, we know from documentary evidence, that Edward the Confessor built at Thorney a church in a new style, and that this church was constructed by Norman architects, and was, no doubt, a Norman church. William of Malmsbury, describing the change among the clergy under the Normans, says : "Videas ubique in villis ecclesias, in vicis et urbibus monasteria novo edificandi genere consurgere." "You may see churches and monasteries rising in a new style of architecture." Now, if the Norman was a new style, the Saxon which preceded must have been different ; and Ordericus Vitalis, speaking of the state of England in 1070, says : "Fiebant et reparabantur basilicæ." "Churches were built and repaired;" and certainly it is probable that the churches which were repaired four years after the Conquest, were Saxon buildings. If, then, we find in early Norman churches details very different from those common in that style, we cannot, I think, be fairly accused of unreasonable credulity if we suppose them to be relics of that old style, which was different from that introduced by Edward the Confessor in his church at Thorney or Westminster ; nor is it really a valid objection that some of these peculiarities are found in churches, which are known to have been built after the Conquest ; for the question is not so much, whe-

ther a Saxon or a Norman monarch held the throne, at the time a church was built, as whether the building is of the Saxon or Norman style ; and, though it is manifestly impossible that the details of a style, first used in the eleventh century, can be found in buildings of an earlier date, it is neither impossible nor improbable that details common in the latter part of the tenth, and the beginning of the eleventh, should occasionally be met with, particularly in obscure and remote districts, after the time of the Norman Conquest ; and it is certain that besides those buildings which are clearly transitional, there are many instances in which the different styles overlap each other, if I may so say, in a very abrupt and striking manner.

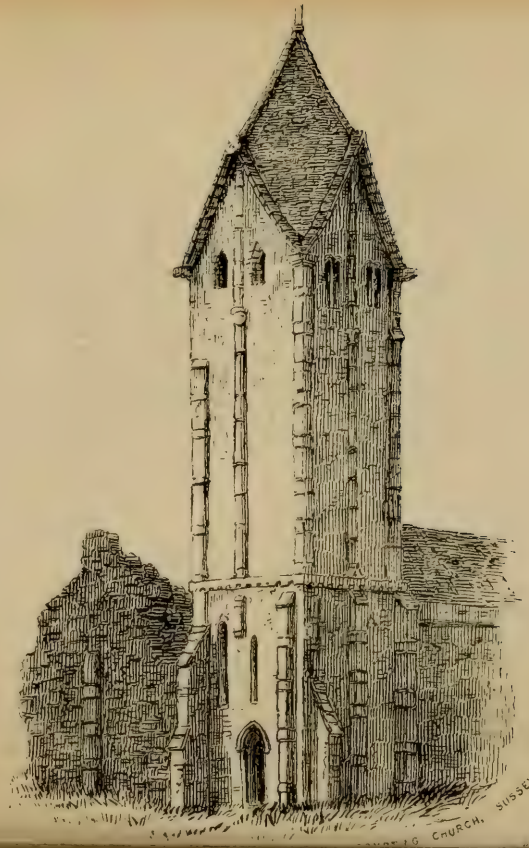
In order to render my description of these peculiarities more distinct, I will divide them into those of the masonry, arches, doors, windows, and towers, of Anglo-Saxon date. And first, with regard to the masonry—this will almost invariably be found to consist of very rough and irregular rubble, or rag-work, the joints wide and the cement coarse, in one case,—the church at Britworth, near Salisbury,—containing pounded brick, which is supposed to be a Roman custom. It has been also observed that stones of a much larger size than those used by the Normans, are to be found among the smaller rubble ; but the most characteristic point of the masonry is, that it is often divided by narrow vertical strips of stone, which at first sight appear to be merely superficial, but on closer investigation will generally, I believe always, be found to extend quite through the thickness of the wall, forming a sort of frame work for the rubble, in the same manner as wooden uprights are used in forming what we in these days call a brick nogging, and are probably nothing more than stone substitutes for the timber, which had been used in earlier

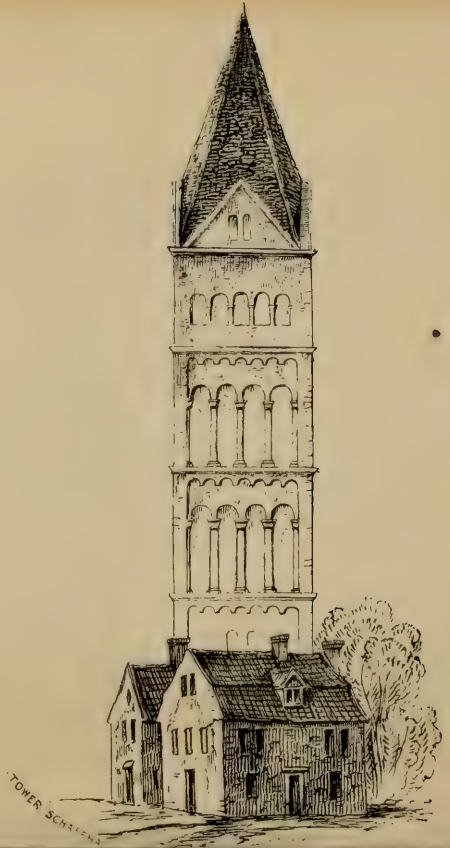
times for that purpose. The quoins, too, are usually constructed of what is called long-and-short work, which consists of long upright stones, alternating with much shorter ones, which are usually of greater breadth, and act as bond stones on both sides, though at Sompting, the long and short stones appear to be of the same breadth. This system of bonding, I believe, has not been observed in Normandy, though it is found to exist in Sicily, in buildings supposed to have been erected by the followers of Guiscard de Hauteville.

Anglo-Saxon arches, when large, are usually semicircular, composed of coarse, irregular masonry, rising from a rude abacus or impost, frequently showing an attempt at imitation of Roman mouldings. When small they are often flat-sided, the capitals of the piers are sometimes coarsely carved in a manner very different from Norman work, and, as well as the bases, seem to be of a debased Roman character. The doors are generally semicircular, shewing traces of long-and-short work in their jambs; though at Dunham Magna, in Norfolk, at the west end, there is a triangular canopy over a square-headed door-way, consisting of a fillet with the edges cut into a sort of square billet ornament, with shafts of a similar character. The windows, which are small, have also generally semicircular heads, though they are not unfrequently flat-sided—their chief peculiarity being that the splay, which in Norman windows is perhaps invariably internal, is, in Saxon work, nearly, if not quite, equal; so that the narrowest part of the opening is at the centre of the wall. Small circular windows, splayed in this manner, are not uncommon in churches of this style.

We now come to the towers of this style, of which, as being probably the most costly, as well as the strongest

BRITISH MUSEUM


CHURCH, SUSSEX.


TOWER SCHEME

parts of the church, a much greater number have come down to us nearly in their original state, than of any other part of the building. These towers, though the walls are of great thickness, do not usually present the striking massiveness of proportion which is found in those of the Norman period. Sompting, with its steep gables and spire-like roof, is a strong instance of this difference of proportion. They are frequently of three stages; each stage being smaller than that below. They are destitute of buttresses and internal staircases, and generally bonded at the quoins with long-and-short work. The pilaster-like strips of stone before described, are generally to be observed where the masonry is not hidden by plaster—in some to a great extent—and at Earls Barton in such profusion as almost to have the appearance of trellis work. They have frequently small triangular windows, and in the belfry stage, commonly a small double window, the division of which is formed, not as in Norman work, by a shaft, but by a baluster placed in the centre of the wall, and supporting an impost, which extends through its whole thickness.

These are the most striking peculiarities of which I am aware. They are, perhaps, seldom all to be met with in the same building; but their effect is such, that they can hardly be mistaken when once pointed out, for the more common details of Norman buildings. Good examples of them all will be found in the illustrations of the Archæological Journal, and in the new edition of Rickman's work on Gothic architecture. It is a curious corroboration of the theory, that these peculiarities are indicative of Anglo-Saxon work, that similar architectural details are represented in illuminations of the ninth and tenth centuries, though I believe not in any of later date.

I will now hazard a conjecture as to the style of the

buildings of which these curious relics of antiquity are fragments; for I cannot bring myself to believe that no greater difference existed between it and the Norman, than that of ruder workmanship and less skilful building. The classical architecture of Rome in its debasement seems to have diverged into three, or perhaps four different channels—the Byzantine, Lombardic, Norman, and that style of Romanesque which appears to have prevailed in some parts of Europe, particularly in Germany, as late as the fifteenth century. Of the Byzantine, the most celebrated specimen is the Mosque of St. Sophia, at Constantinople. Of the Lombardic, a splendid, and I believe correct, specimen may be seen in the church recently erected at Wilton, by the Honourable Sidney Herbert. Germany is full of the fourth variety, and our own country affords us numberless examples of the Norman, from the magnificent cathedral down to the humble parish church. All these styles the beautiful works of Mr. Galley Knight, the masterly drawings of Mr. Pettit, and the valuable work on German churches by the master of Trinity College, Cambridge, have made familiar to every admirer of ecclesiastical architecture. Now if we include them all under the generic name of Romanesque, the specific difference of the Norman appears to be, that it has a gothicizing tendency, or in other words, is a transitional style, which runs as easily into the early English as that into the decorated; which is not the case with the others, which are fixed and complete styles. A scientific architect would no doubt be able to explain this clearly; but unfortunately my scientific attainments on this, and I am afraid on all other points, may fairly be described as a negative quantity; and though I think that from habit I can tell a Norman building when I see it, from the other varieties of

Romanesque, I am not presumptuous enough to attempt to explain to others what I very much doubt whether I understand myself.

Now, we know that the Anglo-Saxon church, from the time of Augustine to that of Edward the Confessor, was peculiarly devoted to the Roman Pontiff—that the communication between England and Rome was frequent and intimate—that some of the Saxon kings, amongst others the youthful Alfred, visited the eternal city; and, in short, I am afraid that if ever a thoroughly priest-ridden people existed, our Saxon ancestors were that people. It was therefore much more likely that they should have derived their ecclesiastical architecture from the fountain head, than from any other source. Benedict Biscop is said to have built churches "more Romano," and Wilfred, Archbishop of York, whom we know to have founded churches after his return from Rome, at the end of the seventh or the beginning of the eighth century, no doubt built them "more Romano" also.

Wolstan, in his metrical description of Winchester Cathedral, as re-edified by the Bishops Athelwold and Alphage, about the year 980, says: "He repaired the courts of this old temple with lofty walls and new roofs, and strengthened it on the north and south sides with solid aisles and various arches; he added also many chapels, with sacred altars, which distract attention from the threshold of the church, so that a stranger walking in the courts, is at a loss where to turn, seeing on all sides doors open to him without any certain path. He stands with wondering eyes, fascinated with the fine roofs of the intricate structure, until some experienced guide conducts him to the portals of the farthest vestibule. Here, marvelling, he crosses himself, and knows not how to quit, so dazzling is the construction, and so

brilliant the variety of the fabric that sustains this ancient church ;"—a description it must be allowed, little suggestive of the simple, stern majesty of an early Norman cathedral. Nor is his description of the tower, in which may be recognised some similarity to that of Sompting, at all more like one of Norman date. "Moreover," says he, "you have added a lofty temple, in which continual day remains—a sparkling tower, that reflects from Heaven the first rays of the rising sun. It has five compartments, pierced by open windows, and on all four sides as many ways are open. The lofty peaks of the tower are capped with pointed roofs, and are adorned with various and sinuous vaults, curved with well-skilled contrivance. Above these stands a rod with golden balls, and at the top a mighty golden cock, which boldly turns its face to every wind that blows." The description of the monastery, built by Alfred at Athelney, as given by Camden, on the authority of William of Malmsbury, is as follows : "He founded there a little monastery, the whole frame whereof hanged upon four main posts, pitched fast in the ground, with four round isles of spheric-work contrived and brought round the same." Now, however little applicable these descriptions may be to Norman buildings, they are by no means unlike Lombardic or Byzantine edifices, particularly the last, which, if we suppose it to have been a square building, with round towers at the corners, having a dome and pinnacles, such as we know from illuminations to have been in use among the Saxons, was a building of decidedly Byzantine character. That domes were used by the Saxons is rendered probable by an illumination of early date, which contains an object which seems to be intended to represent one.

The conclusion from what has been said, which after all is little more than a guess, is this, that the style of

architecture which prevailed among the Anglo-Saxons, was a variety of Romanesque, probably a rude imitation of Lombardic, with some intermixture of Byzantine details, bearing no greater resemblance to the Norman, than was necessarily the consequence of their common origin from the classical Roman.

The interest attaching to this point, I think, will at once be admitted by every antiquary who remembers that from the time that Benedict Biscop began to build churches "more Romano" in the seventh to the close of the twelfth century—a period considerably longer than that occupied by the three pointed styles. Romanesque, in some shape or other, was the style of ecclesiastical architecture which prevailed in this island; and that the Norman does not occupy above 150 years of that period; that during a considerable part of that time the Anglo-Saxons were neither an uncivilized nor an unlearned people, but one which gave birth to such men as Benedict Biscop, Wilfred, the Venerable Bede, Ethelward, Aldhelm, and the immortal Alfred—which entered into treaties with Charlemagne, and held no obscure position in the political system of Europe; nor is the field by any means a narrow one. There is probably far more Saxon work in existence than is generally supposed, particularly in the eastern and northern counties. In Somerset the West Saxon Kings had more than one residence; and I doubt not the traces of their work may be found in many places, if carefully searched for. It has been supposed that it is useless to look for Saxon work in any church that is not mentioned in Doomsday-book. But this is not necessarily the case, for, though a wonderful production, Doomsday-book is by no means a perfect survey; and not being undertaken for ecclesiastical purposes, does not mention more

than about 1,700 churches, though we know that many more, and some (as Dorchester, in Oxfordshire,) of great importance, existed in places where no church is mentioned.

A very few years ago we knew but little more of Norman work than we do now of Saxon, and in those few years we have learned to discriminate between early and late Norman, and to decide with tolerable accuracy the date of each building. Nor are differences wanting in Saxon work which may probably be discovered to be good criteria of date. For instance, may we not conclude from the decidedly Roman character of Brixworth, and the Roman composition of the cement at Britworth, that they are of very early date—either relics of Roman civilization, or instances of the skill directly imported from Italy. Again, if we find, as we very probably may, that in some cases the pilaster-like strips of stone are really superficial, instead of extending through the thickness of the wall and forming a frame-work for the rubble,—may we not, taking the analogy of Grecian architecture for our guide, conclude that those buildings in which only the appearance exists, are of later date than those in which the strips are actually the frame of the building; an idea which appears to me to gain strength from the fact of the long and short stones in the quoins of Sompting tower, (which, from its similarity to that described by Wolstan, is probably not earlier than the middle of the tenth century,) being of equal breadth, and consequently not really useful as bonding; and when we find plans or details of marked Byzantine character, may we not suppose that they were introduced either by the Northmen, (whose intimate connection with Constantinople is proved by the fact of Harold Hardrada commanding the Varangian Guard about the year 1030, as well as by the coins of Greek

emperors and ornaments of Oriental character constantly found in Norway,) or by Theodore, a native of Tarsus, in Cilicia, who was appointed primate of England by Pope Vitalian about the end of the seventh or the beginning of the eighth century.

But it may perhaps be said all this may be very true, but what practical good can arise from the study of such a rude style of architecture. I will mention a fact which I am sure will be sufficient to satisfy any archæologist that great practical good might arise from a more particular study of the Romanesque styles. Some time since I had occasion to apply to a very learned ecclesiologist for information as to the date of the earliest known specimen of a lychnoscope or low side-window, and the answer I received was that he had seen one in a Romanesque building. Now my object was to find, if possible, some ritual observance, the introduction of which about the time of the earliest known lychnoscope, might perhaps have thrown light upon the intention of those mysterious apertures; but for this purpose his answer, taking in as it did a period of full 500 years, was manifestly useless.

I fear I have handled a subject, to master which requires learning, in a very unlearned manner. I have felt all along that I was in danger of getting beyond my depth. Whether I have escaped that danger or not I am by no means certain; but should I have been the means of drawing the attention of any one to Saxon remains, and by so doing should elicit a few communications on the subject, my object will in great measure be obtained; for archæological induction can only be satisfactorily drawn from the knowledge of many facts, which can hardly be obtained by the unaided exertions of a few individuals, however zealous they may be in their antiquarian researches.

Holwell Cavern.

BY ANDREW CROSSE.

HOLWELL Cavern is a fissure in a limestone rock, situated at the north-west side of the parish of Broomfield, in the county of Somerset. This rock has been quarried for several years, and is perfectly free from organic remains; but occasionally cubes of sulphuret of iron are found embedded within it. There is a difference of opinion as to the kind of limestone of which it is composed. Some geologists have determined it to be mountain limestone; but I know not how this can be reconciled with the entire absence of organic remains. I believe the mass of it is of the transition kind, but containing some veins of bituminous limestone. In the immediate vicinity, and to a certain extent within the cavern, are strata of clay slate, which come into contact with the lime rock which lies at the foot and eastern side of the grawacke of the Quantock Hills, upon which it rests. The length of the fissure, as far as it has been examined, is 127 feet; and it is from three and a half feet to twenty in breadth, and from five, to upwards of twenty, in height. Its direction is from east to west, and it is entered at the eastern end. There are some other smaller fissures on the north side of

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ENTRANCE TO HOLWELL CAVE.

the main one, running nearly at right angles to it. At the extreme western end of this cavern is a small pool of water, supplied by a little spring which percolates the rock and passes off through the bottom of the pool. The entrance into the cave has its roof and sides covered with stalactitic carbonate of lime, and you descend several steps, which have been hewn in the rock to allow a better ingress ; and the main fissure has likewise been widened artificially for the same purpose. The roof and sides of the western end are more or less covered with snow-white crystals of arragonite, in great variety—massive with fibrous crystals diverging from a centre—coralliform, composed of aggregations of diverging crystals, (*flos ferri*), mostly translucent, rarely transparent—the colour varying from a snowy white to pale red, but mostly the former. These crystals readily scratch common carbonate of lime, and even glass, but with some difficulty. Water is constantly dropping from the projections of the roof at the western end, and the arragonite would be slowly increasing were it not for the depredations committed on it for some time past by collectors of specimens, who, not contented with fracturing it in all directions, have partially blackened the roof by the smoke of candles. Very large stalactites and stalagmites also have been removed, so that the cavern presents a very different appearance from what it originally did when first discovered. It has been stated both by myself and others, that all the common carbonate of lime found in this cavern has been formed solely upon limestone, and all the arragonite upon clay-slate—Since this statement has been made I have closely examined the matrix upon which these crystallizations are deposited, and though I still find a very large proportion of arragonite upon the clay-slate, yet I find a considerable quantity of

similar arragonite formed upon limestone. There is a wide difference between the rapidity of the growth of the arragonite and that of the common carbonate of lime, the latter increasing several inches in length, whilst the former makes an almost, or quite, imperceptible progress. Thirty five years ago I observed a small basin in the floor of the principal northern fissure of the cavern. This basin was then about fourteen inches in diameter and five inches in depth, and was kept full and overflowing by water constantly dropping from the stalactitic roof. The bottom and sides of the basin were formed of stalagmitic carbonate of lime. At present, instead of exhibiting a concavity five inches in depth, it presents the appearance of a stalagmitic convexity, having its centre elevated upwards of two inches above its circumference, so that, measuring from the bottom of the basin, as it was thirty five years ago, and unto the top of its highest projection, as it is at present, it has grown fully seven inches in height, giving a stalagmitic increase of one inch every five years, or one-fifth of one inch in each year. Now this is certainly a most rapid growth, and far greater than I should have anticipated. If loose stones are thrown into the water of the small pool at the western end of the main fissure, they are, after no long period, entirely covered with crystallized carbonate of lime, in the well-known form of dogtooth spar. I cannot say how long a period is sufficient for this. This water holds a certain quantity of carbonate of lime in solution, with a little sulphate and muriate of lime, and a trace of common salt; but I suspect that these ingredients vary in proportion at different times of the year. The arragonite found upon the roof of the cavern contains no strontia, which was at one time considered to be a necessary ingredient in all arragonites; but this is by no means the case, as,

although this earth is found in many arragonites, there are at least an equal number without it. The main difference between arragonite and common-carbonate of lime, consists in its greater hardness and difference of crystallization—in fact, it is altogether a different arrangement of molecules. This arragonite contains no other substance than carbonate of lime, with the exception of now and then a small proportion of oxide of iron, which occasionally tinges it, giving it a peach blossom, pale red, or yellow colour.

So far I have given a description of this fissure in the limestone rock, or rather in the united rocks of the limestone and clay state. I now come to the *cause* of these crystalline formations. During several distant periods of my life, I have visited this cave, feeling assured that I should sooner or later learn some new principle from an examination into its interesting crystallizations. I have ever considered that in one sense it is better to follow nature blindfold than art with both eyes open; and very many years since I felt convinced that the formation and constant growth of the crystalline matter which lined the roof of this cavern, was caused by some peculiar upward attraction; and reasoning more upon the subject, I felt assured it must be *electric attraction.* Sir Humphry Davy, in pursuing the train of his magnificent discoveries, had found that while all acids were attracted to the *positive* pole of a voltaic battery, in like manner all alkalies, earths, and inflammable substances, were directed to the *negative* pole. His experiments were carried on mostly with very powerful batteries, whose action soon ceased; and although splendid in their results, were perfectly incapable of producing those more durable effects which are shown by a feeble, but long-continued, electrica action—such as

nature uses in her vast and varied laboratory. Moreover, there are other conditions besides electrical action, necessary to be observed, such as *a more or less even temperature*, *absence of light*, and in many cases a *constant motion* of the fluid holding the crystallizable matter in solution, either by dropping from the roof of a cavern, or by water constantly flowing, or by the continual alternate elevation and depression of the surface of the subterranean waters, which surface is for ever varying—low in summer, or more or less overflowing in winter—but *constantly in motion*. It is this eternal motion that greatly facilitates the growth of crystals. This would seem a strange doctrine in a chemical laboratory, where *perfect rest* is more or less essential to the formation of well-defined saline crystallizations ; but such is by no means the case with metallic and earthy matters. I have kept up a constant electrical action for three successive months, upon fluids in a state of unceasing ebullition, in a sand heat furnace, day and night without a moment's rest, the evaporated fluid being duly replenished and watched in the *most careful manner* ; yet the crystals formed were as perfectly solid and regular as similar ones taken from a mine, and were much accelerated in their growth both by the heat employed and by the motion communicated by such heat. There is another condition essential to the production of nearly, if not quite all, regularly-formed metallic, and most earthy, crystallizations. It is the interposition of a *porous medium* between the two opposite electrical poles engaged in the work of forming minerals. In art this is brought to pass by the intervention of tabular surfaces, or cups of porous earth, or other porous material, which is used to separate the fluids or substances acted on, so as to bring them together slowly and regularly into a solid form. It is

absolutely impossible, within the limits of this paper, to describe the various and immense advantages which attend this mode of operating, which acts as a sort of comparative safety-valve to the electric energy, having a vast tendency to check an undue power, and to keep apart the attracting principles from too hasty a union, which would be destructive of mineral crystallization. In nature, this is effected by wider or narrower veins of moist clay, termed in Cornwall "flookans," and which accompany most of the metallic lodes. These flookans are occasionally of immense size, and are sometimes parallel to the lodes, but mostly divide them at more or less obtuse and acute angles. Without these flookans, or other similar checks, in all probability no regular crystals would be discovered in mines. Electricians divide all known substances into what they term *electro-positive* and *electro-negative*, each of which is composed of self repellent particles, but attractive of their opposites. Thus the electro-positive particles held in solution are attracted to the *negative* pole of the voltaic battery, and the electro-negative ones to the *positive* pole. If a too powerful electric action be excited, the crystallizable matter will be attracted to its respective pole in a gelatinous or powdery form, according to its nature ; but no solid or definite formation will take place. If a somewhat less action be employed, a more solid but shapeless mass will be obtained ; but if a feeble power be made use of, the consequence will be the production of crystals with definite, well-formed facets—exactly similar in all respects to natural ones of the same kind. I have now an experiment in action which has continued for eight years without ceasing. It consists of the passing of a feeble electric current through a solution of silicate of potash, the negative pole of the battery being connected with a

piece of oak plunged into the solution of flint. On a platina wire, immersed in the same solution, and connected with the positive pole, is forming a deposit of silicious matter larger than a crown-piece, and arranged in concentric layers of white and brown shades—closely resembling what is termed fortification agate. It was very soft and gelatinous at first, but has been gradually indurating, and is at present considerably more solid than it was, although it is entirely covered by the solution. The old saying, "Ars longa, vita brevis," is strikingly exemplified here. Thus, *time* is required to bring these matters to perfection. The diamond is probably the electrical crystallization of ages. Now there are two reasons why heat and motion are greatly conducive to electrical crystallization. The first occasions a more rapid evaporation of the water holding the crystallizable matter in solution, and causes the fluid acted on to be a far better conductor of electricity. The second, or *motion*, so disposes the atoms that it agitates, that, being polarized by the electric action—that is, each atom having its opposite extremities rendered respectively positive and negative—they present themselves more readily to the opposite pole of the battery—the negative end of the atom to the positive pole having its outside still positive, or the positive end of the atom, as the case may be, being drawn to the negative pole, having its outside still negative ; so that there is no impediment to the even and quiet passage of the electric current, and the continual transfer of the atoms acted upon to their respective poles. This may be better understood by placing a common magnet flat upon a table, with a sheet of paper lying upon it. If you let fall a mass of iron filings at once upon the paper, they will be attracted by the magnet below it into the form of a rude

mis-shapen heap; but if such filings be slowly sifted through a fine sieve, they will assume the form into which they are attracted by their respective polarities, and present a beautifully regular appearance, in obedience to the forces of the magnetic current. I must again observe that in such a sketch as this, I am only just able to touch upon the more prominent points affecting the subject upon which I am treating, otherwise I might adduce a host of experiments, whose results have undeniably proved the advantages of motion, in the electrical formation both of amorphous and crystallized matter. As one instance, if the electric influence be passed through lime water, when perfectly still, and a similar current be passed through an equal quantity of the same water, when kept in a state of agitation, the production of crystals of carbonate of lime will be much more rapid and abundant in the latter, than the former case. In fact, nothing in Nature stands still, however it might seem to repose.

"Nature ne'er meant this vast creation,
To lie one dull lethargic whole,
But, mistress of her great vocation,
Gave to the mass a glowing soul."

"Thus, from their deep recesses beaming,
Sprung life, and light, and joy to bless,
And billowing waves and waters streaming,
Their mighty Maker's hand confess."

All animal, vegetable, and mineral life, (for life it is, though of a lower order) is constantly advancing or receding.—*In the mineral world no two dissimilar substances come into contact or conducting communication with each other, with the intervention of water, without the one giving, in the course of time, a something to the other.*—Like the animal, or vegetable, they are in continual warfare, the result of

which are new substances—an apparent evil, out of which springs good,—exhibiting first, the deformity of decay, but ending in boundless beauty, and infinity of exquisitely varied formation. I have no doubt but that the secondary cause of these mighty changes is the electric principle,—Nature does not work with the voltaic battery of man, with its two dissimilar metals, and associated fluid, but she progresses, although with similar elements, yet different ones. The grass covers the soil with its verdure, absorbing from that soil electrically, the principles which support its growth, and decomposing by a power, far superior to that of art, and by laws ill understood, the substances in contact with its roots ; making even the hard flints subservient to the birth of the tender vegetable above—carrying substances apparently insoluble by such a process, into its remotest ramifications, laughing at the devices of the chemist, and the boasted philosophy of man ; still, let us endeavour to imitate, though at a humble distance; let us search for those laws, and although often baffled, we shall be well recompensed. The vast strata of granite and clay-slate which often come into contact, moistened by these subterraneous waters, are quite sufficient to excite electric currents, amply fitted for the purposes they have to perform. I have often produced crystalline matters without the use of a metal in its metallic state, or indeed any battery whatsoever. Some years since, being at Weymouth, I observed some rounded limestones and some sea shells embedded in the clay of a small perpendicular cliff, each stone and shell being covered with crystals of sulphate of lime. On looking around to investigate the cause of the formation of sulphate of lime upon these substances, I discovered a stratum of decomposing sulphuret of iron, running horizontally on the top

of the cliff and just below the soil ; accordingly I reasoned thus.—The rain-water penetrating the soil moistened the sulphuret of iron, and decomposed it, the oxigen of the water converting the *sulphuret* to the *sulphate*, and the sulphate of iron being a soluble salt, passed through the clay, and was slowly admitted into contact with the surfaces of the limestones and shells. A local electric action was excited, in which the limestones and seashells became negative, whilst the upper stratum of sulphuret of iron was positive. The sulphate of iron and carbonate of lime suffered each a decomposition, and sulphate of lime was produced in a crystallized form upon the negative surfaces of the limestones and shells, carbonic acid gas being liberated ; moreover, this iron being deprived of its sulphuric acid, absorbed oxigen, and was converted into red oxide of iron, which was abundantly precipitated around the base of the crystals of sulphate of lime, in a powdery form. In order to prove the correctness of this theory, on my return home, I took a large basin, half filled it with pipe-clay and kneaded up with water to the consistence of moist putty, and imbedded in the clay some pieces of limestone and some seashells. I next formed a stratum upon the clay of powdered sulphuret of iron, and then filled the basin with common water, and put it aside in a dark cupboard for a twelvemonth. At the end of this period I brought it into the light and examined it with no small anxiety ; but was delighted to find that every piece of limestone and seashells which had been embedded in the clay, when taken out, washed and dried, was covered with prismatic crystals of sulphate of lime, exactly similar to those found in the cliff at Weymouth, but of course they were small, though perfect. Such are the effects of what I term LOCAL ELECTRICITY. Observe that here no

battery was used, nor metal in its metallic state. It was simply a close imitation of nature, but followed out only for a year, whereas nature has at her command unlimited time and resources. Now as we find the great body of amorphous and crystalline formations which exist in the subterranean fissures or lodes to exist at a more or less considerable distance from the surface of the earth, and as the subterranean heat is found to increase pretty regularly from a few feet beneath the surface to the greatest depth which has been sunk, we may conclude that the temperature in which they are found is most congenial to their formation, as well as is the uniformity of such temperature. In fact, I commonly find in my artificial processes, whether I employ a higher or lower temperature, that it is desirable it should be as even as possible, thereby corresponding to the conditions under which they make their appearance in nature. I think, with many others, that the existence of a central fire within our globe is highly probable, and likewise that such heat is nearly constant ; or, if in a state of gradual diminution, that such diminution is extremely slow and regular, and not calculated to produce appreciable changes in the course of some centuries. The presence or absence of light occasions a very considerable difference in the electrical formation of crystals, both as regards their form, the size of each crystal, its solidity, the space over which they extend, and their adhesiveness to the substance upon which they grow. In some instances exposure to daylight altogether prevents the desired formation. I have found this to be the case with respect to sulphate of strontia. An apparatus calculated to produce such a formation was exposed for two months in a room with a southern aspect, but not a single crystal made its appearance on the southern side, and but

a few very minute ones were visible on the northern or shaded side, whereas on being carried down into a dark subterranean cellar and deposited on a shelf, prismatic crystals of sulphate of strontia rapidly shot out on all sides, and at the end of fifty-three weeks exceeded half an inch in length. Many years since I filled a tumbler with water taken from the pool in Holwell Cavern, and exposed it to the action of a small voltaic battery excited by water alone, connecting the opposite poles of the battery with the Holwell water by two platinum wires let fall into the opposite sides of the tumbler. An electric action immediately took place, which continued for nine days, but not finding any formation upon either of the wires, I was about to remove the whole apparatus, when at that precise moment a party of friends called and remained sometime. This most fortunate delay prevented the removal of the apparatus till the next or *tenth* day, when, as I went for the purpose of so doing, I plainly observed some sparkling crystals upon the negative platinum wire, which proved to be carbonate of lime, attracted from the mineral water by the electric action. I afterwards repeated this experiment in a dark cellar, and produced a similar result in six days. This was the first experiment of the kind. I have at present a glass quart jar, filled with the Holwell water, acted on by a small voltaic battery, through the medium of two platinum wires. It is placed on a shelf in the *dark*. I have likewise an exactly similar apparatus, alike in all respects, except that it is placed on a shelf in the *light*. These were both set in action on the 20th of last August; within ten hours crystals of carbonate of lime began to form on the negative wire of each, but none on the positive, and they have now considerably increased on both negative wires; but there is a wide dif-

ference between the crystalline formation in the dark and that in the light. In the first, the crystals are decidedly larger, and longer, and more firm. In the last they have a more soluble appearance, and are not so firmly attached to the wire. Besides, the termination of the negative wire in the light is surrounded by a kind of halo of insulated specks of carbonate of lime, forming a small ball of about one-fourth of an inch in diameter. When viewed through a lens, it exhibits a singular disjointed appearance. Now the negative wire in the dark has had such an influence on that side of the glass jar, that it is being covered to a large extent by carbonate of lime formations, which is not the case with the similar wire in the light, save to a very limited extent. In fact, certain of the sun's rays are electrical, and neutralize to a great degree, or materially change the electrical formation, which would take place were the experiment conducted in the dark. We have thus seen that the union of *electric action*, with a *moderately uniform temperature*, and *sufficiency of heat*, to prevent congelation of the fluid under action, *absence of light*, together with the interposition of a more or less *porous medium*, will attract the crystallizable matter from its solution and produce a variety of forms, which will not make their appearance without such conditions. We have likewise seen that those crystallizations or formations are greatly assisted by constant motion. Just on the conditions which exist in Holwell Cavern, and under these circumstances, I have produced about 200 varieties of minerals, *exactly* resembling in all respects similar ones found in nature, as well as some others never before discovered in nature, nor formed by art. Still, there are a vast number of minerals which, in the present state of the science, defy the ingenuity of man to imitate, but many

of which might have been produced by *central* or *volcanic heat*, or immense *pressure*, added to the other requisites. The last thing to consider is—*From what source does the required electric action arise?* Now in answer to this, as far as we know, it most probably arises from one of the following causes; first, from terrestrial electric currents, caused by permanent magnetic action passing at right angles to them; or secondly, from similar electric currents excited by the union of vast strata of dissimilar rocks in contact with subterranean waters; or thirdly, from similar currents either excited or aided by a central or volcanic heat, perhaps coming under the laws of thermo-electricity; or fourthly, and lastly—by the local electric action before alluded to, and which, I presume, is always the case as respects the formation of *insulated* crystalline matters which are found scattered in all directions—often at a great distance from metallic and earthy lodes or veins. These latter are probably formed by the constant action of definite terrestrial electric currents. In the case of Holwell Cavern, the electric power is probably excited by the contact of the clay slate and limestone strata; or there might be a definite current passing along, or at right angles to the main fissure, occasioned by terrestrial electricity, (the existence of which is *certain)* and on the *negative* portion of the roof and sides of the fissure, the arragonite would most certainly be deposited. I once formed some beautiful regular and irregular crystals of arragonite in a very simple manner, viz. by filling a common salting pan with spring water, and placing the two halves of a brick upon the bottom of the pan, at a small distance from each other, and resting a whole brick upon them, in the form of a bridge. Each end of this upper brick I connected by platinum wires with the opposite poles of a

weak voltaic battery, in constant action for three months, the apparatus being kept in a dark room. At the end of the above period I removed the bricks, and found that the negative end of the upper brick was rather strongly connected with the lower half brick on which it rested; and on forcing them asunder I discovered that the cementing material was composed of crystalline arragonite, some of which was formed upon both the united surfaces of the bricks, in snow-white needle crystals, radiating from their common centre; others were in the form of well-defined six-sided prisms, with flat terminations. These latter took shelter in some of the cavities of the bricks. The explanation of this is simple enough. The bricks were made of clay containing a certain per centage of lime. The water into which they were plunged contained a certain proportion of hydrochloric acid as one of its component parts. This acid was directed to the positive end of the brick, where it acted on the lime at that end, forming muriate of lime, the acid of which was retained at the positive end, and the lime, attracting carbonic acid from the water, formed carbonate of lime, which was directed to the negative end of the brick, where it shot out in crystals of arragonite. *Why* arragonite was formed here, instead of common carbonate of lime, I am at present quite at a loss to guess. I had the pleasure of shewing this formation to two highly scientific gentlemen, one of them a gifted foreigner, and one of the most distinguished chemists in Europe. I have at other times formed arragonite in different modes, but never could account for the reason why arragonite appears at one time, and common carbonate of lime at another, either in art or nature. The present theory of crystallization is most imperfect, little being known about it. I once by chance hit upon a mode of

producing the crystallized red oxide of copper, either in cubes or octohedrons, at pleasure; but I can give no reason why the one always made its appearance in one case and the other formation in the other. The day will probably arrive when more will be known of those matters.

I now come to another point, most intimately connected with geology; I mean the formation of fissures in the earth, on which I have made many experiments. If you take a porous pot—(a common garden pot will do, but it is better to cork up the aperture at the bottom of it)—and fill it with clay kneaded with water to the consistence of moist putty, (pipe-clay is the best for the experiment), and stand it upright in a large basin of water, in such a manner as that the surface of the clay in the pot shall be elevated four or five inches above the surface of the water in the basin; then connect the water in the basin by a platinum wire with the *positive* pole of a constant, but weak, voltaic battery; and lastly, force a platinum wire into the middle of the moistened pipe-clay in the pot, vertically, and at about half the depth of the clay, connecting the other end of the wire with the *negative* pole of the battery; the following effects will take place: If the battery is *feeble*, after a few days action two fissures, forming with each other two obtuse and two acute angles, will appear in contact with the wire, and will divide the clay vertically from top to bottom. The size of these fissures is comparatively great; and they will quickly be filled with water, drawn upwards from the moistened clay, which will form a small pool on the top of the clay, where it will shortly increase till it drops over the side of the pot, through a notch which should be cut in it, into the basin below. The clay would thus be soon emptied of its water, were it not replenished by that in the basin, which

passes through the porous medium of the garden pot, and keeps up the supply. Here we have, first, fissures in the moist clay, caused by a weak *negative* electricity ; secondly, a constant spring of water, *rising above the level of the supply*, occasioned by the same *negative* electricity ;—the first accounting for fissures made in strata when soft, but afterwards indurated by *time ;* the second, for springs issuing from the tops of hills elevated above all the surrounding ones. To *prove* that this is caused by *negative*, and *not* by *positive* electricity, reverse the connections of the wires with the poles of the battery, making that in the clay *positive* instead of *negative*, and that in the water in the basin *negative* instead of *positive*—then no FISSURE will take place in the clay, and all its moisture will be drawn out of it and added to the water in the basin, *incontestibly* proving that the fissures and spring were caused by *negative*, and *not* by *positive* electricity, nor by capillary attraction. If the experiment as first described be repeated, only substituting a *powerful* for a *weak* battery, a rapid and strong action will take place within the clay, and large pieces of it will be forced up in all directions, and large fissures produced, filled with a comparatively large quantity of water. Here we have the earthquake. Some years since I noticed an account of an earthquake in the kingdom of Ava, in the East Indies, in which it was stated that the earth opened in tremendous chasms, which were instantly filled with water, which gushed out in sufficient quantity to flood the surrounding country, causing vast damage. It was stated that each fissure was deep enough to float a man-of-war. Is not this closely analogous to the experiment here described ? Again, if while the weak electric current is passing through the clay, as at first represented, you plunge three or four glass funnels

vertically into the clay, at some distance from each other, and fill each funnel with a solution of different metals, sulphur, &c. &c ; in the course of time these solutions will find their way through the clay into which they are stuck, and their metallic salts will be attracted by the same negative influence which occasions the other phenomena, become decomposed, and line the fissures with metallic earthy, or sulphureous crystals, according to the nature of the fluids employed. Here you have the *metallic* or *earthy lode*. By a similar apparatus, and using three funnels, filled respectively with silver, copper, and sulphur in solution, the experiment being continued for two years, and the fluid kept duly replenished, I lined the two fissures in the clay with the following substances, amorphous or crystallized native silver, sulphuret of silver, native copper, red oxide of copper, sulphuret of copper, and crystallized sulphur. Here were two complete lodes, which became considerably indurated at the termination of the experiment,—a mine in a garden pot. This would be sufficient to account for the fissures in the Holwell lime rock, when in its incipient state of moisture. Had metallic solutions been then in its vicinity, with a sufficient electrical current, sufficiently long continued, we should have seen there an east and west metallic lode, instead of an empty chasm, partially lined with arragonite or carbonate of lime. Nevertheless, as it is, it is a most interesting cavern, and the extreme beauty of the arragonite, even in its present state cannot easily be described. I shall conclude with an extract from an unpublished poem touching on this subject.

> "Here not a breath at hand, nor distant sound,
> Nor insect's hum disturbs the calm around ;
> Silence, and sleep, and breathless, starless, night,

Here claim unquestioned, an eternal right.
The sheep's rude bleating, and its tinkling bell,
Pierce not the chasm, nor disenchant the spell.
The shepherd's whistle, and the watch dog's bark,
The raven's croak, the rapture of the lark,
Die on their passage, e'er they reach the gloom,
Or wake the echoes of the mineral tomb.
Here, whilst new realms arise, and old decay,
And centuries of crime are swept away,
The night-born filagree of ages gone,
Fenced from all living gaze, creeps slowly on.
Pendant from arching roof the drops concrete,
Till the rude floor the growing crystals meet,
And arborescent shoots their branches twine,
Like the soft tendrils of the tangled vine ;
The dazzling whiteness of whose stems might vie,
With drifted snows that on the mountains lie.

On the Perpendicular Style, as exhibited in the Churches of Somerset.

BY EDWARD A. FREEMAN, M.A.

IN appearing before a local body, at the request of its own executive, to illustrate any portion of the antiquities of the district which forms the sphere of that body, while I am sensible that such a request, preferred to a stranger, is a compliment of a very refined nature, I cannot but feel an unusual diffidence in treating the subject in the presence of so many who must be so much better acquainted with many branches of it than myself. I feel, of course, no greater difficulty than elsewhere in describing and commenting on those individual buildings which I have myself examined; the danger is that of generalizing from insufficient premises, and passing by typical instances with which greater local experience might have made me familiar. And I therefore feel the more grateful to those members and officers of the society, who have so kindly acted as my guides to many of the most important churches in the county, with which I might otherwise have remained unacquainted. As it was at their invitation that I undertook

the subject in the first instance, it is by their means that I am enabled to treat it in a somewhat less imperfect manner. Even thus, I have of course examined only a very small proportion of the numerous churches of so large a district; but I have gone, as far as I was able, into different parts of the county, and I trust that I have been enabled to see some specimens of most of the leading types that it contains.

And, if it be not demanding too great a sacrifice of your patience to my own egotism, I cannot help venturing the remark that I have acceded to such a request as emanating from a Somersetshire Society, with a peculiar pleasure beyond what would have attached to it from any other quarter. Though I am in no way connected with this county by property or residence, and though I had not the honour to be born within its limits, it is one in which I venture to challenge a degree of interest, and whose boundaries I never pass without a feeling of satisfaction on many grounds. I may call myself all but a native of it, as my very first recollections appertain to the town in which we are now assembled, when the striking objects of its natural scenery, Worle Hill, Brean Down, the Channel, the Holms, and the distant mountains of Glamorganshire, made an impression upon my childish imagination, which is not likely ever to be effaced. And to come more directly to our immediate subject, I have always maintained, and that with a very intimate knowledge of the churches of Northamptonshire, and some little acquaintance with Lincolnshire itself, the claims of the churches of Somerset to take precedence of all specimens of parochial architecture in the kingdom. To my mind, contrary, as I am fully aware, to the general opinion, they exhibit the most perfect style of architecture in its most perfect form, and are particularly admirable for that feature, which it is well nigh the greatest

boast of our English builders to have brought to its perfection, their graceful and majestic towers. I have selected, out of the buildings of all ages and all nations, the west front of a Somersetshire parish church as the frontispiece of my most important published work; in calling attention to a strange and almost forgotten cathedral, I have recognized the influence of Somersetshire models upon one of its most important features;* finally, in tracing out the infinitely varied forms of window tracery, I have found the most perfect of its later shapes well nigh the peculiar possession of the local style of this county.† In the district where I now reside, in those more distant regions of our island which have lately attracted most of my attention, I generally find that the highest compliment I can pay to a church is to say that it reminds me of a Somersetshire building. From the banks of the Severn to the rocks of Pembrokeshire, occasional imitations have from time to time reminded me of the structures of this favoured region; while in every neighbouring county, Dorset, Wilts, Gloucester, I have been always pleased to recognize some faint forestalling of the more perfect splendours contained within the fortunate limit. Being thus connected with your county by a tie which to me is no slight one, and having always looked to it as the very Utopia of architectural beauty, I may be excused for dwelling at some length on the peculiar satisfaction which I have derived from the present invitation to become the more special illustrator of its merits.

Of course I do not profess on the present occasion to put before you a complete treatise on the churches of Somerset; such a subject would require a far more general

* Architecture of Llandaff Cathedral, p. 17.

† Essay on Window Tracery, p. 191.

knowledge than I can pretend to, and would also be far too extensive for the limits of a single paper. I prefer to adhere strictly to one branch of the subject; and indeed the churches which I have recently visited with an especial view to the composition of this paper, I have examined almost exclusively with reference to that branch, often passing by, with but little attention, portions which were interesting solely on other grounds. But I cannot help recommending to this society to undertake a full and systematic examination of all the churches in the county, a work to which I should be proud to contribute my humble assistance, with a view to the publication of descriptions something in the same form as those put forth by the Northamptonshire Society. At present my general remarks will be very brief, and I will pass as soon as possible to my immediate subject, the Perpendicular of the district.

The strength of Somersetshire, like that of Northamptonshire, lies in its parish churches. It is not indeed so entirely denuded of conventual remains as that county, but even monastic ruins, much less monastic churches retained for parochial purposes, do not seem to be a striking feature in its architectural wealth. The grand buildings which I am best acquainted with are all of the strictly parochial type, although they occasionally approach in size and splendour to the dignity of cathedral or conventual buildings, and moreover belong to a style in which the two types of the minster and the parish church run much more into one another than was usual at an earlier period. At the same time it is an honourable fact for the local architecture that it admitted of having churches of the cathedral type erected in it, a circumstance probably occurring nowhere else. The Cathedral of Wells was indeed built before a local style had been developed of sufficient merit to be employed in

such a structure, but the two churches next in importance which the county contains, belong essentially to the local Perpendicular. I mean Bath Abbey and St. Mary Redcliffe. The latter is perhaps the only parish church in England conceived throughout on the cathedral model, with the sole and unfortunate exception of the absence of a central tower; and it is one which Somersetshire may claim as its own with the most perfect right. It is throughout an example of Somersetshire Perpendicular, a development on the cathedral type of the style of Wrington and Banwell. And I am by no means sure that we ought not to point to St. Mary Redcliffe as the cradle of the style. Its most important features are beginning to be developed in the transepts of that church, which are transitional from Decorated to Perpendicular. If we conceive them to have afforded the general model, we can readily account for the retention throughout the whole Perpendicular period of what I regard as the distinguishing and characteristic merit of Somersetshire work, namely the combination of unity and grandeur peculiar to the Perpendicular style with much of the delicacy and purity of detail more commonly distinctive of the earlier styles. Nowhere is this so conspicuous as in the transepts at Redcliffe. The general notion is intensely and magnificently Perpendicular, while the details are still to a great extent Decorated.

I have spoken of St. Mary Redcliffe as a Somersetshire church; I hope my Bristol friends will not consider their municipal independence invaded, if I place their whole city, for architectural purposes, within the limits of my favourite county. The architectural march, indeed, extends a good way into Gloucestershire; but Bristol is an integral part of the mother county. Its churches certainly form, in some respects, a marked class by themselves, but they

only differ as the type of Wrington differs from that of Taunton, and must be considered as forming a portion of the same whole.

Previous to the Perpendicular period, the churches of Somersetshire appear to have been, for the most part, structures of no very great pretensions. They seem to have been usually without clerestories, and, I suspect, very frequently without aisles. This I infer from the arcades being almost always Perpendicular ; we can hardly suppose that earlier arcades would have been so generally destroyed had they ever existed. They were frequently cruciform, and they have transmitted the use of that shape to some complete churches of the Perpendicular period, at which time I need not say it was very seldom employed in original designs. In some parts an octagonal tower, sometimes central, sometimes at one side, appears to have been frequent. The square western tower, when it existed, seems to have been very small and plain, as at Wilton and Trull. St. Mary's, Bridgwater, is an example on a larger scale, but with no further allowance of ornament. Now unfortunately, it seems destined to have all its characteristic features obliterated by that subtle form of destruction, which arrogates to itself the name of restoration.

In a general survey of the county, all traces of these earlier fabrics should be carefully attended to, and the different types which they may present among themselves should be accurately marked, as well as referred, as far as possible, to their causes; how far, for instance, they may be attributable to the influence of different abbeys, how far to the different stone of different localities, or to the appropriate requirements of different kinds of scenery. All these are points of great interest and importance, and ought to be thoroughly well worked out, but I can at present give them only a very limited share of attention.

These smaller and more ancient fabrics were far from being without influence on their more magnificent successors. A Perpendicular church seems to have been very seldom entirely erected from the ground ; the chancel at least of the old building is generally retained, and too frequently, from its smaller size and inferior architecture, it forms a sad blot on some of the most stately fabrics of all. I may mention Wrington and Yatton, the latter especially. Here we have a cross church, of which the chancel, transepts, and central tower received only some modifications and additions during the Perpendicular repair, while a nave of the most magnificent character was erected to the west of them. The result is a ludicrous insignificance on the part of the chancel, and in the interior that ruinous circumstance to the effect of a cross church, lantern arches disproportionately low.

I suspect that in many cases, where the church was not cruciform, they first erected the tower to the west of the old nave, and afterwards attempted to bring the rest of the church into harmony with it by re-building the nave, (or, what is practically much the same, adding aisles to it,) and subjecting the chancel to greater or less modifications in detail. This would account for the very small Perpendicular naves which we sometimes find attached to the most magnificent towers, as at Bishops Lydiard. They were cramped for room by the old chancel at one end and by the new tower at the other.

I will allude briefly to a few instances where considerable portions of the early fabric remain, or where it has greatly influenced the subsequent Perpendicular structure. Whitchurch, near Bristol, is a good specimen of the original cross church without aisles ; viewed from the north, it appears to be entirely unaltered, but on the south side the transept

has been destroyed, and an aisle carried along nearly the whole length of the church, producing an outline very common in Jersey, but very rare anywhere else. This little church has many points well worthy attention, but chiefly on grounds quite alien to our present purpose. At Othery, a cross church without aisles, and at Kingston, if I may be allowed the bull, a cross church without transepts, the original ground-plan is untouched, but the central towers have been re-built in Perpendicular times. Stoke St. Gregory is perhaps a more instructive case than any. This was originally a small Early English cross church with a central octagon. Of this fabric, the chancel, transepts, and tower seem to remain, with only alterations in detail. But a large Perpendicular nave and aisles, altogether disproportioned to the size of the church, have been substituted for the original western limb. So great was the increase of height that the ridge of the new nave roof came very nearly to a level with the top of the original tower. Consequently the Perpendicular builders added another stage to the latter in a manner harmonizing better with the original than such alterations often do ; and, what ought to be accurately observed, the original belfry windows were blocked and converted into niches for images.

In these cruciform buildings the original fabrics have necessarily had more influence on their successors than in other instances. They supplied an important feature in the central towers, which it would have been wanton prodigality to have destroyed. But even in other cases, their influence has not been unimportant. The retention of the original chancels has prevented one common Perpendicular development from obtaining in Somersetshire. We do not meet with the quasi-basilican type of Perpendicular church, in which the aisles run uninterruptedly

to the east end or within a bay of it, the distinction of chancel and nave being made wholly by internal screen-work. It is indeed very usual for chapels to be added north and south of the chancel, but they almost always retain the character of chapels as distinguished from aisles, and the abrupt finish of their rich parapets often contrasts in a singular manner with the high-pitched dripping roof of the chancel. Wrington is a conspicuous instance.

The typical Somersetshire Perpendicular church consists of a lofty and elaborate western tower, standing disengaged from the aisles; a nave and aisles, with or without a clerestory, according to circumstances, with very commonly a large southern porch as high as the aisles; a high roofed and comparatively insignificant chancel, containing traces, more or less extensive, of earlier work, but with Perpendicular chapels on each side. Transepts are not uncommon, but cannot be called typical. There is a tendency to polygonal turrets in various positions; west of the aisles, as at St. Cuthbert's, Wells; east of the nave, as at Banwell; flanking a west front without towers, as at Crewkerne and Bath Abbey; north or south of the nave and aisles, often forming an approach to the rood-loft, of which there is a remarkable instance at Burrington, crowned with an elegant little spire. Pierced and other enriched parapets are common. The roofs are of various kinds, but different forms of the coved roof are typical here, as in the rest of the West of England and South Wales. The interiors are rich in screens and other kinds of wood-work, but with these, as ecclesiological rather than architectural, I have at present nothing to do.

We may generally remark, though the position must be taken with considerable exceptions, that the work in the northern part of the county is better than in the southern.

This, I am informed, is owing to a difference in the kind of stone employed. In the north we find a remarkable delicacy of workmanship, while, in the south, with the same general character, with nearly equal magnificence of general design, and with the same tendency to retain early detail, there is often much coarseness and clumsiness in the actual execution. This is particularly conspicuous in St. Mary Magdalen, Taunton, a church of most imposing general effect, but whose details will not bear examination. In the south we find ashlar masonry less commonly used in other parts than the towers, and a coarse battlement is in common use, while in the north we continually find straight parapets elegantly pierced, and more commonly broken by pinnacles. In the best churches in Bristol we find the same general excellence of work as in the neighbouring part of Somerset, but from the crumbling stone employed, the external enrichments have almost entirely vanished.

TOWERS.

I begin now with the towers. One would have thought that it could need no argument to prove that a grand Perpendicular tower ranked among the noblest triumphs of architectural skill, and that it was among the greatest boasts of England in general, and of Somersetshire in particular, to have brought so glorious a feature to perfection. Even the ecclesiological school, in their intense depreciation of our most truly national architecture, do not deny its positive beauty, but are content to place it after the form which finishes in a spire. This is a mere matter of taste, on which we may well be content to differ; it is in fact simply a question between the highest degree of grace and the highest degree of majesty. But there is another view of the subject which cannot be passed by so lightly,

or so gently. A writer whose works have recently made no small stir in the architectural world, has taken upon him to assert that all the world is wrong in this respect, also as well as in most others. The author of "the Stones of Venice,"*—what, by the way, would the world have thought if Dr. Layard had given us "the Bricks of Nineveh?"—would probably think the stones of Wrington, or even of Glastonbury, altogether beneath his notice; but it is impossible for an admirer of those glorious structures to let them fall undefended before his attacks, even though it is only a stab in the dark which is aimed at them. The two great offences appear to be presence of pinnacles and of buttresses, which I, like I suppose most other people, have hitherto considered to be very ornamental and necessary appendages. Now any difference about pinnacles or buttresses with such men as Mr. Petit or Dr. Whewell, one would argue out calmly and dispassionately, and with the deference due to such distinguished names; but it is impossible to preserve common patience over the childish rant with which Mr. Ruskin goes about to prove pinnacles offenders against what he calls the "Lamp of Beauty." "I believe," he says, "that all that has been written and taught about proportion put together, is not to the architect worth the single rule, well enforced: 'Have one large thing and several smaller things, or one principal thing and several inferior things, and bind them well together.' Sometimes there may be a regular gradation, as between the heights of stories in good designs for houses; sometimes a monarch with a lowly train, as in the spire with its pinnacles. The varieties of arrangement are infinite, but the law is uni-

*The Committee beg it to be understood, that while giving free scope to fair criticism, they do not commit either themselves or the Society to the adoption of the opinions expressed by contributors.

versal—have one thing above the rest, either by size, or office, or interest. Don't put the pinnacles without the spire. What a host of ugly church towers have we in England, with pinnacles at the corners, and none in the middle! How many buildings like King's College Chapel, at Cambridge, looking like tables upside down, with their four legs in the air! What! it will be said, have not beasts four legs? Yes, but legs of different shapes, and with a head between them. So they have a pair of ears, and perhaps a pair of horns—but not at both ends. Knock down a couple of pinnacles at either end in King's College Chapel, and you will have a kind of proportion instantly."*

I am really ashamed to read out talk of this kind before a rational audience; but the passage is a good sample of Mr. Ruskin's diction and logic. Here we have "a monarch with a lowly train;" here "a table upside down, with its four legs in the air." Why should not the table stand erect, and the monarch be reversed, so as to realize at once the Herodotean tale of Hippocleides? But the real question is, what have either the monarch or the table, to say nothing of the horses, goats, camels, or hippopotami, which come after them, to do with St. Cuthbert's tower, and King's College Chapel? Herein lies the great force of Mr. Ruskin's style of logic. He puts two things together by an arbitrary juxta-position, and then expects you, first of all, to accept the juxta-position as an analogy, and finally to accept the analogy as an argument. What has a monarch and his lowly train to do with it? Why may I not, in the nineteenth century, erect, if I think good, a thoroughly republican steeple? Why may I not, if I choose, like some of my friends, to symbolize ecclesiastical

* Seven Lamps of Architecture, p. 115.

facts, terminate my tower with the four Doctors of the church, or even with the Twelve Apostles? I cannot, suspect Mr. Ruskin, of all men, of wishing to violate the strictest equality among the latter. Fresh from "the Stones of Venice," I would fain, if any conceivable shape of tower would allow me, crown my edifice with a Council of Ten; will my master require greater pre-eminence to be anywhere assigned than that belonging to the little Doge who tries so modestly to bring himself into notice at the corners of Taunton and Weston Zoyland? What would Mr. Ruskin have done had he lived

> "In lordly Lacedæmon,
> The City of two Kings?"

How would he have designed a rival to the Giralda, in the reign of Ferdinand and Isabel? Again, he tells us, "what, it will be said, have not beasts four legs?" By whom will it be said? Could the idea enter into any man's head but his own, that the legs of beasts could prove anything, either way, as to the beauty of King's College Chapel? I am fully aware that beasts have four legs, just as other members of the animal kingdom have two, six, eight, or a hundred; but I am too blind to see how any architectural principle can be deduced from this most indisputable fact. And as for the beasts "with legs of different shapes, and with a head between them," I much doubt whether the deserts of Africa, or the sculptures of Nimroud, exhibit anything half so marvellous. I must appeal to the Natural History section of the Society to inform me whether any such are to be found in rerum natura. *

* I have since discovered that, if not in nature, they at least exist in art. In Mr. Wilson's Archæology of Scotland, p. 556, an animal is represented exactly realizing Mr. Ruskin's hippogryph or martichoras.

But there is another count against our towers; besides the fault of pinnacles, they have to answer the farther accusation of buttresses! Mr. Ruskin treats us to the following piece of declamation on this subject, which I should be exceedingly obliged to any philological friend to translate into some intelligible tongue of the Indo-Germanic family.

"There must be no light-headedness in your noble tower; impregnable foundations, wrathful crest, with the vizor down, and the dark vigilance seen through the clefts of it; not the filigree crown or embroidered cap. No towers are so grand as the square-browed ones with massy cornices and rent battlements * * * But in all of them this I believe to be a point of chief necessity,—that they shall seem to stand, and verily shall stand, in their own strength; not by help of buttresses nor artful balancings on this side or on that. Your noble tower must need no help, must be sustained by no crutches, must give place to no suspicion of decrepitude. Its offices may be to withstand war, look forth for tidings, or to point to heaven; but it must have in its own walls strength to do this; it is to be in itself a bulwark, not to be sustained by other bulwarks; to rise and look forth, 'the tower of Lebanon that looketh toward Damascus,' like a stern sentinel, not like a child held up in its nurse's arms. A tower may indeed have a kind of buttress, a projection, or subordinate tower, at each end of its angles; but these are to its main body like the satellites to a shaft, joined with its strength and associated with its uprightness, part of the tower itself; exactly in the proportion in which they lose their massive unity with its body, and assume the form of true buttress walls, set on at its angles, the tower loses its dignity."*

* Stones of Venice, p. 200.

Now, in the name of common sense and common English, what does all this mean? If Mr. Ruskin thinks the tower of Magdalen College, or even the western tower of Wimborne Minster, better than Wrington, Titchmarsh, and North Petherton, let him; it is a fair question of taste, on which we may differ quite comfortably; but why all this rant and dogmatism? What is "light-headedness in a tower?" What is "wrathful crest?" could Sir Samuel Meyrick himself have derived any idea from a tower "with the vizor down, and the dark vigilance seen through the clefts of it?" The Glossary fails to inform me what is meant by "square-browed towers," and "rent battlements," unless indeed a tower cannot put in a claim to "nobility" till its parapet has been damaged by a thunder-storm. Finally, *why* is all this? Why cannot our buttressed towers do all these fine things? Why cannot Taunton tower "rise and look forth," &c. &c. though as I do not know the form of "the tower of Lebanon," which I believe the royal lover likens to the nose of his bride, I cannot profess to say which of our Somersetshire types departs furthest from that ideal. To come to the main issue, I can of course only dogmatize back again; if I say "there should be no top-heaviness in your noble tower," I feel quite sure of being right; if I say it should have its "vizor up," though I do not know what that means, I think probability is on my side, inasmuch as I am asserting the contrary to Mr. Ruskin; and I lastly solemnly affirm that what Mr. Ruskin says about "crutches" and "bulwarks supported by other bulwarks," is simply a specimen of his false analogies.

From Mr. Ruskin and his vagaries let us turn to one who does not indeed write about "Lamps," or "Sheepfolds," or "Stones of Venice," but who has an eye to discern, a

pencil to pourtray, a mind acute enough to understand for himself, and capacious enough to tolerate the opinions of others, and who, above all things, does not disdain the natural and appropriate use of his native language. I set up no man's *ipse dixit*, but I always have a peculiar pleasure in finding myself ranged by the side of Mr. Petit. The following is his judgment, as well argued as it is simply expressed.

"This style (the Perpendicular) appears to the greatest advantage in the finish of towers. We know how the Germans avoided the horizontal line in that part of the structure. The sides of a tower or octagon often terminated in gables, and the whole was surmounted by a dome or spire, which was of wood, if the substructure was not capable of bearing one of stone. In the Perpendicular English, on the contrary, the tower was boldly finished with the horizontal line; broken, it is true, with the embattled parapet, and varied with pinnacles, but still without disguise or concealment; for it was felt to form an excellent contrast with the vertical lines of the edifice. The square tower, with its capping of battlements and pinnacles, (I cannot name a better example than that of Magdalen College, Oxford,) is one of the noblest features of Gothic architecture, and is peculiarly our own; nor is it confined to one class of building; the town, the village, the episcopal city, all alike boast it as their chief ornament."*

DIFFERENT TYPES OF TOWERS.

The more elaborate of the Perpendicular towers of Somerset, although forming one great class, may yet easily be grouped under several minor subdivisions. Three

* Church Architecture. i. 208.

great classes very readily present themselves, which I will now endeavour to trace out.*

First Class, Taunton. I will first describe that which is the most usual, and which is employed in several churches of very great beauty, though I must, in my own mind, give it a place below either of the other two. At the same time I will promise in no way, by word or deed, to assault or maltreat any person who may hold a contrary opinion. This type I will call that of Taunton, as being employed in the two stately steeples of that town, of which, as we all know, that of St. Mary Magdalen must, for height and magnificence, claim nearly, if not quite, the first rank in the county. The characteristic of this type, which seems principally to be found in the south, is that the height above the church is divided into numerous stages, and that a staircase turret at one corner, most usually the north-east, is combined with double buttresses at all the four corners, while all the pinnacles are of equal height. Of this type St. James at Taunton, Bishop's Lydiard, Isle Abbots, and Huish Episcopi are noble examples. The two latter I only know from drawings ; but I can answer for the admirable beauty of the two first; anywhere else they would probably rank first among the towers of the district. It shows the wonderful wealth of Somersetshire that we have to place such beautiful structures in the lowest class of merit ; the lowest, of course I mean, among those which make any pretensions to architectural magnificence. St Mary Magdalen, at Taunton, is of this type, but it sins against the first law of tower building, which I conceive to be that there should be a gradual increase of lightness and decoration towards the top. The lower parts

* I am here working out more at length what I have already sketched in my History of Architecture, p. 386.

should be plain and massive; the necessity of a large western window and doorway renders this character only the more necessary on the north and south sides. The stage or stages between the west window and the belfry-stage should hardly have more than single windows; in the belfry they are larger, and double or treble, and the open parapet and pinnacles crown all. The Taunton tower, on the other hand, has double windows, nearly as large as those in the belfry-stage, in the two stories beneath, so that this progressive diminution of massiveness is quite lost. At Bishop's Lydiard, on the other hand, it is beautifully preserved; we have first a stage with a single window, then one with a single window flanked by a niche on each side, finally, the belfry-stage with double windows. This is observed in one face only of St. James's tower at Taunton, a steeple exceedingly like Bishop's Lydiard, and which struck me as surpassing it in dignity, while Lydiard has a sort of grace peculiar to itself. Chewton Mendip I have only seen from the top of a coach, but I should imagine it to be an example of the same class, of greater magnificence than either.

The fault of these towers I conceive to be, that having a distinct staircase-turret carried up the whole height, they do not give it any prominence, but allow it to conceal itself among the buttresses and pinnacles at the corner, and instead of its natural finish of one large pinnacle, assign it only a small battlement, perhaps fringed with diminutive pinnacles of its own. The uniformity of the structure is destroyed, without any proportionate gain in picturesque effect. I therefore venture to assign to this first class the lowest place in the scale.

Second Class, Bristol. The second class is distinguished from the first, by the manner in which it avoids this last

fault; that is, by bringing the staircase turret into prominence, and crowning it with a single large pinnacle, rising above all the rest, so as, I imagine, to exempt this class from the extreme severity of Mr. Ruskin's censure. The same division into stages is preserved as in the former type.

Towers of this class differ much more widely among themselves than those of the former, among which we may observe a similarity approaching, in many instances, almost to identity. This is the prevailing tower in the city of Bristol, and in a smaller and plainer form, it seems common also in the adjoining part of Gloucestershire. Its grandest specimen is of course the magnificent tower of St. Stephen's, which however must quite stand by itself. This tower is remarkable for having æsthetically dispensed with buttresses, those which it has having so slight a projection as hardly at all to influence the general effect. It has indeed almost the appearance of a Gothic version of the old Italian campanile. However this may be, its idea, which is one quite peculiar to itself, though it may not altogether approve itself to our preconceived notions, must be allowed to be, in point of fact, magnificently worked out. I may remark however that one commendation which I have always bestowed upon this steeple is, I find, undeserved, at least by its orginal condition. At present it is remarkable for the absence of top-heaviness, when we consider that it is entirely square, without any receding of any kind. But I find that the present parapet is not a true reproduction of its predecessor; the old one had domical turrets, more like Thornbury, and also small projecting pinnacles, with flying-buttresses at the angles. This last feature is found in some very splendid towers, but I can never bring myself to admire it, as it certainly gives an appearance of inse-

curity to the top of the tower. Of the same general type is St. Werburgh's, and several smaller steeples in Bristol. A famous example of this class is the celebrated tower of Dundry, which I have myself only seen at so great a distance, that for its details I must trust to engravings. It has the same sort of parapet, with open turrets and projecting pinnacles, as Taunton and St. Stephen's; but it is by no means so artistically treated as the latter. The buttresses, being more prominent, require a greater connection with the parapet than they possess—a fault less conspicuous in the square outline of St. Stephen's—and the manner in which the square open turret is set upon the octagonal one which it crowns, seems extremely awkward, though it is, as we shall hereafter see, by no means unparalleled.

These two classes naturally run very much into one another, the only difference being in the degree of prominence given to a feature which exists in both cases. I should consider those only to be pure examples of this second, in which buttresses are entirely absent from the corner occupied by the staircase-turret, so as to give the latter its full importance. It is no wonder then that we meet with an intermediate class, in which the turret stands out much more boldly than in the first class, but still has not entirely dispensed with the buttresses at that angle. Such I conceive to have been the famous leaning tower of Temple church in Bristol, one whose appearance is now ragged and unpleasing, but which, when its parapet was in existence, and before its other ornaments had crumbled away, must have ranked as quite the second steeple in the city. Here I can only conceive that the turret would have been crowned with a single large pinnacle; but still its lower portions are very much cloaked by buttresses. At

WRINGTON CHURCH

Banwell and Cheddar are noble towers of this kind, where the turret stands out very prominently, and its pinnacle soars above all the rest; but still a buttress and pinnacle, like those at the other angles, creeps up by the side of it. In fact, the only difference between these and some of the first class consists in the finish of the corner turret. Thus the very stately tower of Weston Zoyland has lost its pinnacles; if in any work of restoration, one large pinnacle should be clapped on the turret (which, however, does not seem to have been its original finish) it would at once be classed with Banwell and Cheddar. The tower at Bleadon, to judge from the engraving in Rutter's Somersetshire, seems to bear some resemblance to Banwell, but must be very inferior. It has diagonal buttresses, and the stage below the belfry is blank. The engraving does not show whether there are any buttresses at the turret angle or not, but I should think there hardly could be.

I am obliged to place this second class higher than the first in the scale of architectural merit, as it certainly marks a higher style of art, to bring forward into æsthetical prominence any feature which really exists, and to treat it accordingly. But I must confess that the actual examples of the first please me much more. St. Stephen's is, after all, rather wonderful than pleasing; none, in fact, of the Bristol towers have any thing of the exquisite grace and delicacy of Bishop's Lydiard. Banwell is indeed a most beautiful tower, but the general character of its composition approximates much more nearly to Lydiard than to St. Stephen's.

Third Class, Wrington. I now come to the third class, which, to my mind is immeasurably superior to either of the others, whether in ideal merit or in actual magnificence of effect. It is a small class, and differs widely from the other two, which may indeed be ranked together in oppo-

sition to it. In both the former classes, the portion between the roof of the church and belfry stage is generally divided into horizontal stages, which have no necessary connexion with each other, and any of which we could conceive being removed with no other prejudice to the tower than simply making it lower. This may be seen very remarkably in the tower at Middlezoy; this is one of the Taunton and Weston Zoyland group, and has quite the same general effect; but, as it stands on higher ground than its neighbours, it was not thought necessary to give the tower itself the same height; consequently there is only one stage between the west window and the belfry, without any other change in the general composition of the steeple.

We may also observe in most specimens of the two first classes a certain weakness in the pinnacles, which seem hardly of sufficient consequence to form the crown of the magnificent structures on which they are placed; while in the few exceptions they are often topheavy, as at St. Mary Magdalen, Taunton. There is also in many cases hardly any connexion between them and the pinnacles, so that the whole parapet seems something altogether extraneous, merely put on, without in any way growing out of or being fused into one whole, with the stages beneath. This third class avoids all these deficiencies, and works up the whole tower into the most perfect unity that can be imagined.

Its ideal form may be thus described. The staircase-turret, as any important æsthetical feature, is entirely dispensed with, being only carried up a little way above the roof of the church, and then finished off under the belfry-stage. The whole portion of the tower above the church is thrown into one vast stage, panelled with two

enormously lofty windows, transomed at proper distances, and with such portions as are necessary pierced for light and sound. This stage is recessed between two flat square turrets or large pilasters, against which the buttresses are finished with their pinnacles just below the parapet. The pilasters are carried up and crowned with spires, forming four magnificent pinnacles to the whole tower, and rising as the natural finish of the pinnacles below. This glorious idea, which I have no hesitation in ranking among the very highest achievements of architectural genius, I have as yet seen completely realized in two cases only, Wrington and St. Cuthbert's at Wells. Of these two I think Wrington may fairly claim the first place, and is therefore probably entitled to the designation of the finest square western tower, not designed for a spire or lantern, in all England, and therefore possibly in the whole world. In comparing it with St. Cuthbert's, we may not only remark a greater degree of a certain indescribable grace, but may point out some definite features in which I think it cannot fail to have the superiority assigned to it. St. Cuthbert's, equal, as I should imagine, in positive height, is more massive in its proportions, and its corner pinnacles are, to my mind, a trifle too large—a fault, however, quite on the right side. I cannot but think that, if a small portion of their elevation had been taken into the general mass of the tower, it would have been a decided improvement. Again, the parapet at Wrington, flat and beautifully pierced, is, in my opinion, decidedly preferable to the battlement at Wells, and is further enriched by the small pinnacles running up between the windows. Had these been absent, the battlement would have been preferable, as the horizontal line must be broken somehow; but these pinnacles, while effecting this, allow the actually more graceful form of

parapet to be employed. Again, the belfry windows at Wrington gain much, from their threefold division by a second transom, while at Wells there is only one. On these grounds, therefore, I give Wrington the first place; but St. Cuthbert's need not be ashamed at being placed second after such a rival.

The same general idea is to be found in St. John's at Glastonbury, a steeple whose size gives it a still greater magnificence of general effect than either Wells or Wrington, but which, on minute critical examination, must be content with the third place. Its height is so great that the whole space above the roof could not be converted into one panelled mass; there are therefore two distinct ranges of panelling, which takes away something from the intense effect of unity which distinguishes the other two; at the same time, this being so, it would have been better if the lower range had assumed more of the character of a quite distinct pair of windows than it has. It is, in fact, a confusion between the notions of one and of two stages. Again, the slope of the buttresses may be considered too great, and they certainly finish too low down, so that the connexion between them and the great pinnacles is much less close than in the other two. These pinnacles again are somewhat squat, and the small spires rise out of projecting battlements—an arrangement far less elegant than the beautiful canopy work at Wrington. Finally, the small projecting pinnacles and flying buttresses produce the same general effect of top-heaviness which I have already mentioned in St. Stephen's.

These three are the only pure examples of this class with which I am acquainted, and I hesitate not to call them by far the grandest square western towers that I have ever seen or heard of. Next to these may come the noble

tower of North Petherton, which is indeed honourable among its fellows, but which attaineth not unto the first three. This steeple will not come exactly under any of our heads, but certainly has most affinity with this third and noblest class. In like manner with them its staircase-turret finishes below the belfry-stage, but the portion above the roof does not form one panelled mass, but is divided into two very large stages. The belfry windows are large and double, with some remarkable pierced panelling in a square frame over them. There are unfortunately no flat turrets, so that the parapet has little connexion with what is below, and altogether there is a great air of squareness and sharpness about the belfry-stage. There are eight pinnacles, as at Wrington and Glastonbury ; perhaps it would have been better had there been a greater difference in size between the principal and the subordinate ones.

I will conclude this part of my subject by noticing the tower of Portishead, which remarkably combines the characteristics of the second and third class. In this case we may remark, by the way, that the solitary aisle is prolonged nearly to the west face of the tower, quite contrary to the usual Somersetshire practice. It is a much plainer tower than any that I have yet mentioned, having only single windows in all the three stages above the roof, and these diminishing in length towards the top. We may therefore pronounce, without hesitation, that the otherwise very beautiful west window of five lights is too large for its position. The parapet resembles Wrington, and the great pinnacles, which have something of the same character, but are less elegant, are closely connected with the buttresses, but in a different manner. A staircase-turret, crowned with a somewhat larger pinnacle, occupies the north-east angle. This turret is square at the base, and becomes octagonal at

about the height of the church, much as at Dundry—a tower with which Portishead has a good deal of affinity, except in the parapet. It strikes me that, when such a turret is introduced, its predominance over the other pinnacles should be greater than it is in this case. But my own view, in direct opposition to Mr. Ruskin's, is very decidedly that this form is only adapted to an inferior class of towers, those of the merely *picturesque* kind; and that in structures of the real architectural magnificence of Wrington and Glastonbury, their designers judged right in making all their pinnacles on a level. I have no recondite argument about the legs, horns, or tail of any creature wherewith to support this view; I can only put it forth as my own view, for which I claim no greater respect, even from those least acquainted with the subject, than the sort of confidence which I am myself always disposed to give to the tact and experience of those who have given attention to any subject of which I am myself ignorant. The tower of Backwell church, which I know only as forming the frontispiece to Barr's Anglican Church Architecture,* may also perhaps be considered as presenting a feeble approximation to the third class, inasmuch as the pinnacles are connected with the buttresses in something like the way described. But the strange and awkward shape of the belfry windows, a broad ogee arch, with its apex piercing through the parapet, deprive it of all real resemblance to Wrington and St. Cuthbert's.

CHARACTERISTICS OF THE TOWERS.

Though we have thus found considerable diversities among the Somersetshire towers, yet no observer can

* I have since passed by it, but without having been near enough for any examination.

fail to remark a very strong family likeness among them. There is a sort of character by which it is not hard to recognize them; there is a great similarity in proportion, and there are also several points of detail which most of them have in common. Thus there is in all a great tendency to panelling in the form of windows, those portions which are requisite being pierced for light and sound; so common is this that, in speaking of windows in a Somersetshire tower, one must generally be understood to mean panelled designs of this kind, partly blank, partly pierced. Panelling not thus grouped into window-patterns, such as we see at Cirencester, Wolverhampton, or St. Margaret's, Leicester, —all noble towers, but not resembling any Somersetshire model—is by no means common. There is however a great deal of surface ornament in the way of decorative canopies and pinnacles, a mode of enrichment used lavishly at least as early as the tower at Redcliffe; and it has often struck me that, in the method of its treatment, the skill of the Somersetshire architects is admirably displayed. No one who has admired at a distance the magnificent outline of the great tower of Gloucester Cathedral can have failed to be disappointed on a nearer examination at the frippery appearance produced by the excess of ornament of this nature; the decorations look as if they were nailed against a plain wall, and had nothing further to do with it. Now somehow or other the Somersetshire architects have contrived to avoid this fault in the use of the very same kind of decoration; perhaps partly by always keeping it in subordination to panelled spaces; whereas at Gloucester there are no such spaces except the windows themselves, which, being of small size and deeply recessed from the surface, look like insignificant apertures in the canopy-work. Another peculiarity is the frequent use of

patterns of stone-work between the mullions, instead of the ordinary louvre-boards. This we find as early as the Decorated octagon at North Curry. The buttresses in the best towers are also almost invariably double, and placed at a little distance from the angles; the diagonal buttress is chiefly confined to towers of smaller pretensions and, strange to say, to central towers, where it seems least of all in place. Pinnacles are not uncommon on the set-off of buttresses at various heights. When we come to consider the influence of Somersetshire upon the neighbouring districts, we shall find that some of these features are common to the Somersetshire towers and those which seem to be imitated from them, while others seem distinctive, or nearly so, of the model region itself.

I cannot help contrasting with the towers of Somerset, one of the noblest that I know in a region where they cannot be supposed to have exerted any influence, and a view of which may perhaps help to show how closely, with all their differences, they hang together as members of one great class. I allude to the tower of Titchmarsh Church, Northamptonshire, remarkable as the only tower, of any consequence, in that county, standing by itself and not supporting a spire or lantern. It at once strikes the eye as something altogether different from any of the Somersetshire classes. The treatment of the buttresses, flat turrets, and pinnacles, may indeed, to a certain extent, recall the type of Wrington and Wells, but the resemblance is exceedingly slight, as the distinctive mark of the small pinnacles carried up in a larger one is absent. The arrangement as used at Titchmarsh is very common in Northamptonshire. In other respects there is no resemblance to any Somersetshire type. The proportions are far more massive, and far greater distinctness is given to the

stages; Taunton or Lydiard appears by the side of it hardly a less complete unity than Wrington itself. This distinctness is partly effected by bands of panelling, for which there is Somersetshire precedent at Huish Episcopi, but much more by the general character of the design. There are no surfaces panelled in window patterns; only the windows themselves, with all their tracery pierced, and no stone work between the mullions. There is no pinnacle or canopy work at all. We may remark that in Somerset the decoration is more equably disposed over the whole design, while in this of Titchmarsh it, so to speak, lies thick in patches, leaving a large portion of the surface quite plain.

SMALLER TOWERS.

In arranging the towers in their several classes, I have of course chiefly had an eye to those remarkable for their size or magnificence. But a visitor to Somersetshire will be grievously disappointed if he expects to find every parish supplying a rival to North Petherton or Weston Zoyland. I have already alluded to the octagonal type of different dates, and to the very plain towers of earlier date, or at least nowise affected by the general Perpendicular style of the county. But besides these there are a good many small and comparatively plain Perpendicular towers which evidently pretend to some imitation of their more stately neighbours. Thus Churchill and Locking towers are respectable structures, chiefly of the Banwell type; Kewstoke is a still smaller specimen of the more distinct Bristol class. So at Crowcombe and Lydiard St. Lawrence are small towers which evidently stand in the same, or perhaps a rather more distant, relation to Taunton and Bishop's Lydiard. At Burrington and Portbury are still plainer Perpendicular towers; the former indeed without pinnacles

or any one Somersetshire peculiarity. All these, it may be observed, have diagonal buttresses. The tower on the Tor Hill at Glastonbury has buttresses more like the usual kind, but has a mere plain battlement, and is otherwise very anomalous.

SPIRES.

Of perfect spires, I imagine the number to be exceedingly small; I have myself only seen Congresbury and Bridgwater,* thereby shewing how much less keen my vision must be than that of Mr. Macaulay's† ideal stranger in the days of "King Monmouth" who when he "climbed the graceful tower of St. Mary Magdalen, owned that he saw beneath him the most fertile of English valleys. It was a country rich with orchards and green pastures, among which were scattered, in gay abundance, manor-houses, cottages, and *village spires*." And the remark I am next going to make will, I think, tend to show that their loss is not to be laid to the charge of Kirke's Lambs or the Bloody Assizes. There is to be seen in Somersetshire and Gloucestershire, a remarkable class of *imperfect* spires. I only actually know of five, St. Mary Redcliffe, Yatton, Minchinhampton, one in Gloucester, and if my memory does not greatly deceive me, Shepton Mallett; but these five, in a region where spires are comparatively uncommon,

*I have since seen another, Worle. I am obliged to the Editor for a list of eight others, Frome, Whatley, Doulting, Croscombe, Chiselborough, East Brent, Stokecoursey, and Pitminster, the last of which, it seems, is a graceful and conspicuous object in the view from St. Mary Magdalen. If his wider observation can supply only this small number, even supposing the list is far from exhausting the whole county, the number still remains exceedingly small, as compared not only with the counties of Northampton, Leicester, or Lincoln, but even with Gloucester and Oxford, where the spire is far less general.

†History of England, i. 581.

certainly point to a localism of some kind, when they are set against the fact that among the countless spires which I have seen in Northamptonshire and Leicestershire I have only met with one similar instance. This is at Naseby, and the local tradition is that it was mutilated at the time of the battle. In the other cases it would require local information in each case to discover whether the spire was left unfinished, or has been subsequently destroyed. I believe St. Mary Redcliffe is generally attributed to the former cause, and Yatton to the latter. In any case it is remarkable, especially when compared with Northamptonshire, where, as far as I have gone, an unfinished spire is unknown; and, in the numerous cases where a spire has been destroyed, the work, with the single exception above mentioned, seems to have been done much more effectually. In the case of Redcliffe, I cannot help thinking that, if the builders intentionally left it unfinished, they knew very well when to leave off. In all designs and models for its completion, the spire looks awfully too high for the tower on which it stands, while in its present mutilated state it presents a slight approximation to the noblest finish of all, the glorious crown of Fotheringhay and St. Ouen's.

Worle Camp.

BY THE REV. F. WARRE.

THE magnificence and beauty of our mediæval structures are so striking, the remains themselves so important, and so suggestive of all that is dear to the poet, the historian, and the ecclesiastic, that no one can wonder at the growing fondness for them, which is one great characteristic of the days in which we live. Who can pass the ruins of a stately castle, its Norman Keep still looking down in stern majesty on its external defences, without figuring to himself the proud baron, who, surrounded by his foreign soldiery, exerted a despotic and too often tyrannous control over the conquered Saxons, and built these towers, within whose walls he might laugh to scorn their attempts at resistance or revenge? Who can contemplate the more elaborate and scientific fortifications of the Edwardian period, without recalling the gallant days of chivalry, and peopling the ruins with good knights and true and noble ladies, whose matchless charms inspired their daring valour? Who again can view such a cathedral as Wells, or wander through such ruins as those of Glastonbury, and not see in imagination the gorgeous procession, the splendid vestments, the attending

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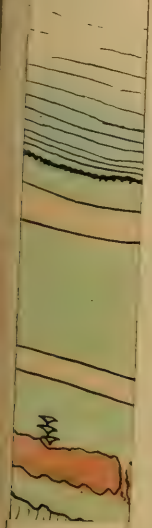
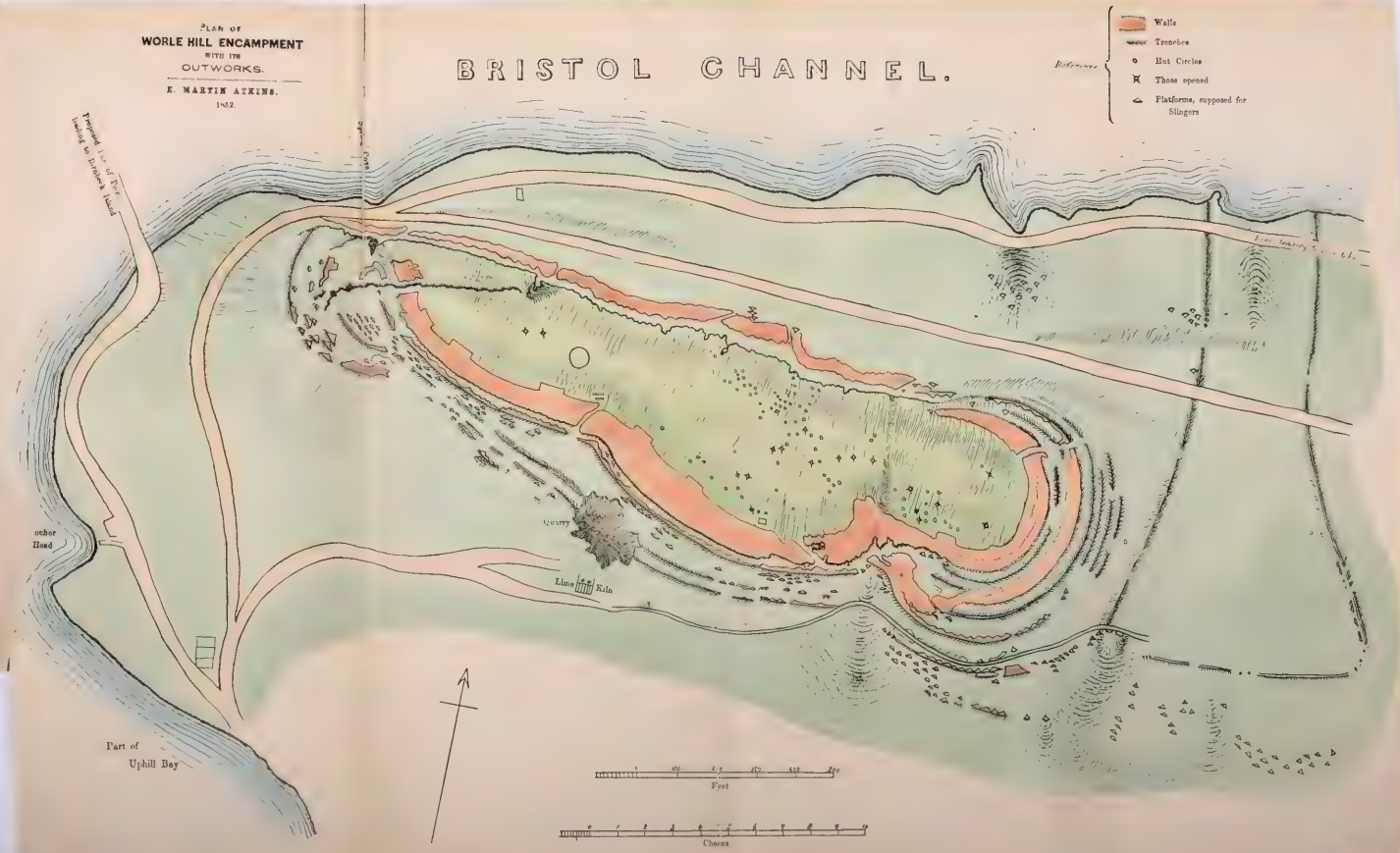



Plan of
WORLE HILL ENCAMPMENT
with its
OUTWORKS.
E. MARTIN ATKINS.
1852.
BRISTOL CHANNEL.
Walls
Trenches
Hut Circles
Those opened
Platforms, supposed for Slingers
Proposed line of Rly leading to Uphill Island
Quarry
Lime Kiln
Part of
Uphill Bay
Feet
Chains

bands of priests and monks, and hear the solemn chant and pealing anthem, while the bishop or mitred abbot presides at the celebration of some magnificent office of religion? Indeed, while fierce wars and faithful loves—while the remembrance of all that is exciting and picturesque in history and romance,—are interesting; while reverence for things holy, and admiration for things beautiful, survive, the stately castle, the solemn minster, and the ruined abbey, cannot fail of obtaining that attention, which except by the most obtuse dullness, or the most egregious bad taste, could never have been denied them. But there are other remains of by-gone days, more ancient and more mysterious than these, compared to which the Norman castle, the cathedral, and the abbey, are things of yesterday, their inhabitants as men of modern days, and their uses and origin plain and well known. These remains have not the charm of architectural beauty, nor the associations of chivalry, to recommend them to our notice. No common ties of religion exist between us and those who raised those earthworks, which we see on the barren down or the bleak hill. And yet to one who, like Wordsworth's traveller, has seen the hills grow bigger in the darkness, these monuments of nations whose political existence closed when the written history of this country began, possess a fascination little, if at all, inferior to those of later days; and their extreme antiquity, and the mystery attached to them, fully make up for the want of those charms which draw the attention so forcibly to the remains of mediæval structures, whether military or ecclesiastical.

On Worle Hill, to the north of the town of Weston-Super-Mare, exists one of the most remarkable and mysterious of these relics of antiquity that I have anywhere seen; to describe which, and, if possible, to shew what it

really was, is the object of this paper. But though it is the proper office of the archæologist to clear away obscurities, I fear there is little doubt that when he has done his best with regard to a fabric which has most probably existed for more than two thousand years, there will be quite enough left to satisfy the most imaginative mind, that ever took the unknown for the wonderful. The military works of the Romans, as well as the roads which they laid down, wherever their dominion was established, were constructed on a scale of such grandeur and durability, that many of them have survived the lapse of sixteen or seventeen centuries, and still bear witness to the power and enterprise of that wonderful people; while the bloody ravages of the Danes hold so conspicuous a place in the early annals of this country as not only to be recorded in real history, but in many cases to have come down to us in the less certain form of local tradition. It is not, therefore, a subject of wonder, that these relics of bygone nations have usually been ascribed either to the conquerors of the world, or to those northern pirates whose incursions were for some centuries the terror of the civilized world. But in reality a very little knowledge of history and antiquities will serve to convince us that probably the great majority of these mysterious structures could not have owed their origin to either of these people; though no doubt, when occasion required, they both made use of the fortifications they found ready made to their hands in the countries which they invaded. The rules of Roman castrametation are so well understood, and the rectangular form, with the gates regularly placed in each side, so universally adhered to by that people, that it is hardly possible to mistake an originally Roman camp for one constructed by any of the other races who have held military possession

of this country ; and even where, as in the case of Ham Hill, in this county, the later invaders made use of the fortifications of those who had preceded them, the part which the Roman camp occupied is frequently to be discerned with considerable accuracy ; while the rapid movements of the Danish pirates, and the astonishing rapidity with which they transferred their armies from one part of the country to another, render it improbable that the fortifications with which they surrounded their temporary camps, should have been of any very substantial character. Indeed I believe it will generally be found that those which are undoubtedly of Danish origin, consist of little more than a trench and rampart hastily thrown up, usually taking the form of the hill on which they are commonly placed, and apparently constructed without much attention to any fixed rules either of fortification or castrametation. When therefore we find, as in the case before us, works of great importance and strength, evidently intended for the permanent accommodation of a large force, and constructed on a plan essentially different from what we know to have been that in use with the Romans, we are compelled to conclude that the original constructors of those works were neither Romans nor Danes; and as it can hardly be that a place of such importance, if of Saxon date, should not be mentioned either in the Saxon Chronicle, or by Asser, or indeed I believe by any other author, it follows that we must date its origin before the Roman invasion, and seek for its founders among the British tribes, whether Belgæ or Hædui, who inhabited this district while Britain was as yet altogether divided from the Roman world.

The first inhabitants of this island were undoubtedly a branch of the great Celtic family which appears to have

held possession of the northern and western parts of Europe from the earliest times. But that they were not all of the same branch, though probably sprung from the same origin, is the opinion which the best Celtic historians have adopted, from certain differences in their language, of which I am no competent judge, being profoundly ignorant of the Celtic tongue in all its dialects. Davis, the learned author of the Celtic researches, gives the following translation from the Welsh triads on the subject of the primitive inhabitants of Britain, collected by Caradoc, of Langarvan, about the middle of the twelfth century :—"The three Benevolent tribes of the Island of Britain. The first were the stock of the Cymry, who came with Hu Gadarn into the Island of Britain ; for he would not have lands by fighting and contention, but of equity and peace. The second was the race of the Loegrys, who came from the land Gwas Gwyn, near the mouth of the Loire, and were sprung from the primitive stock of the Cymry. The third were the Britons ; they came from the land of Lydaw, on the coast of Gaul, and were also sprung from the primordial line of the Cymry. Three tribes came under protection into the Islands of Britain, and by consent and permission of the nation of the Cymry, without weapon, without assault. The first was the tribe of the Caledonians, in the north ; the second was the Gwydellian race, which are now in Albany or Scotland ; the third were the men of Galedin, who came in naked ships into the Isle of Wight when their country was drowned. Three usurping tribes came into the island, and never departed out of it. The first were the Coranied, who came from the land of the Pwyl ; the second were the Gwydellian Phicti, who came into Scotland over the sea of Locklyn or Denmark; the third were the Saxons."

Now the very form of these triads is sufficient to prove that they are unworthy of admission into the canon of real history. But this much is certain, that at the time of the Roman invasion, the whole eastern part of the island was inhabited by a people whose language and manners, in some degree, differed from those of the aborigines, who had retired to the interior and the western coast, and that the greater part of Somersetshire was at that time in the possession of the Belgæ—probably a tribe of the Coranied —who came from the land of the Pwyl, who had conquered it from the Hædui, Cangi, and Danmonii, perhaps not very long before the time of Cæsar; or, as Mr. Guest supposes, the men of Galedin, who had repaid the hospitality of the Cymry by taking from them a considerable part of their territory. Now the learned Davis, whose work I have been quoting, supposes that pure Druidism retired, with its original professors, before the invading tribes; and he is certainly in some degree borne out by the fact of druidical remains being far more common in the western districts, such as Wales, Cornwall, and Cumberland, than in the eastern counties; and also by the fact that the great establishment of Druids, in the time of Agricola, was not at their great temples at Stonehenge and Abury, which were then either in the hands of the Belgæ, or close to their border, but in the Island of Mona, the extreme western point of North Wales. Now there are many druidical remains in different parts of Mendip; and I am informed that there is one at no great distance from this place. The same author supposes that the Hædui, who certainly were settled in this country before the Belgæ, were a tribe of the Loegrys; and if so, it is probable that these druidical monuments are of more ancient date than the Belgic invasion; and from the peculiarity of

its construction, I cannot help thinking that the camp on Worle Hill may be of the same very remote antiquity.

Now it is said that Hamilco was sent by the Senate of Carthage to discover the western shores and ports of Europe, as early as 420 B.C.; and that the Islands of Britain are mentioned by the name of Æstryminides Islands, infested by the Æstrum or Gadfly; but Davis states that the same word, Clêr, (which in British signifies Gadfly), also means a learned man or teacher; and that Hamilco probably discovered, not the islands of the Gadfly, but of the Druids. The expeditions of the Carthaginians to the western shores of this island were undoubtedly undertaken for the purpose of obtaining tin and other minerals; and it is certain that the mines of Mendip were worked by the Belgæ before the Roman invasion, and probably before them by the Hedui, or other aboriginal tribes. May it not then be at least possible that the fortifications on Worle Hill may mark the site of a town inhabited in times of extreme antiquity by persons connected with this traffic, and that from them the primitive Britons may have looked down upon Carthaginian or even Phœnician ships taking in their cargoes of the mineral wealth of Mendip, hundreds of years before the Belgic settlement at Bleadon or the port of Axium were in existence?

That Worle Hill was occupied by something more than a military station, appears probable when we come to examine the remains actually existing upon it, which will I hope, be a more satisfactory employment than guessing at their date and origin. Of this very remarkable fortification Mr. Rutter, in his delineations of Somersetshire, gives the following account: "Worle Hill is an insulated ridge, about three miles long, but not more than a furlong

in breadth, and includes a view of not less than thirty churches from its elevated summit; the western end projects into the Bristol Channel above the town of Weston, and is formed into one of the most remarkable fortifications in England. The length of the space enclosed from the inner rampart on the east, to the point of the hill on the west, is about a quarter of a mile, and the medium breadth is about eighty yards, making an area, as supposed, of fifteen or twenty acres. On approaching the camp from the east, about a quarter of a mile distant from it, is a barrow of loose stones, five feet high and fifteen feet in diameter, which appears not to have been disturbed since its formation. Before arriving at the outer rampart, seven ditches are sunk across the ridge of the hill, out of which it is probable that the stones were drawn which formed the ramparts, besides which, the whole ground, for a considerable distance in front of the camp, is still covered with loose stones. There are two ramparts, about fifteen feet high from the bottom of the ditch, composed entirely of stones loosely placed, without a blade of grass or plant of any kind; these ramparts, with their corresponding ditches, cross the hill in a part where it is about a hundred yards broad, and then, turning westward, are continued as far as the security of the station required. Those on the north are soon rendered unnecessary by the rock, which is there precipitous; those on the south are gradually blended into the natural declivity of the hill, which is nearly as steep as the rampart itself, and like it is composed of loose stones. There is no indication of any building in the area, except a square excavation about five feet deep and seven feet square, the sides of which are built with loose stones without mortar. It has the appearance of the mouth of a large square well, which might have been filled up when the place was aban-

doned. Within the area of this camp are several curious circles, difficult to explain, about twenty or thirty feet in diameter, principally towards the western point, but one is nearly in the centre, composed of separate stones, surrounded by a slight shallow excavation or ditch. On the north side of the camp there is a subterranean passage from the top, through the rock, to the lower part of the hill, which is now almost filled up with stones."

Since this description was written, the trees with which not only the rest of the hill, but unfortunately the area of the camp also has been planted, have grown so much, as to render it impossible to perceive the plan of the fortifications at one view. It appears however to me, to be easily made out as far as the mere fortification is concerned, though the earth works which exist on the south and west sides of the hill have been so much interfered with, and in some parts mutilated, as to present only a maze of inextricable confusion. There can be no doubt that these ramparts were originally not as we now see them, shapeless heaps of stones, but dry walls, erected on the sides of the trenches, from which their materials were taken, and were probably much higher than they are now. This however does not apply to the trenches to the east of the main fortification, where there is no appearance of walls, and which were probably dug to render the level ground on that side difficult to an invading force, while the stones taken from them served to strengthen the fortifications of what I may perhaps be allowed to call the keep of the place, which is a rectangular space, strongly defended on three sides, immediately within the eastern rampart, and divided from the western part of the fortification by a trench cut in the solid limestone. At the south-west angle of this rectangular fortification, we find the traces of the main entrance to the

NORTH WESTERN ENTRANCE WITH FLANKING OUTWORKS. WORLE HILL.

place, which was apparently defended by a strong flanking outwork—whether a tower or no I will not venture to guess—the materials of which lie in a vast heap on the eastern side of the entrance; there appears also to have been a smaller entrance at the north-eastern angle, where the defences are evidently crossed by a pathway. From the western rampart of this part of the fortification, to the extremity of the hill, the ramparts are perfectly evident on the south side, while the precipitous character of the rocks on the north, renders fortification on that side unnecessary. At the north-western extremity there appears to have been a third entrance, defended by an outwork and rampart, and several smaller walls appear to have extended along the south side of the hill. From the great entrance a strong rampart extends to the east, below the principal fortification, to the distance of a few hundred yards, and, turning to the north, crosses the ridge of the hill, to the east of the trenches before mentioned, dividing apparently the main fortification from the sort of outer enclosure formed by a similar rampart, which, having followed the shape of the hill for some distance, turns with a somewhat acute angle, and extends across the hill. The outer entrance to the enclosure appears to have been at the south-west corner, and it seems to have had communication both with the internal fortifications and the level ground to the east, by means of narrow gates in its ramparts. The whole of this extensive fortification is thus divided into four compartments, of which the strongest by far was that to which I have given the name of the keep, from the analogy it bears to that portion of a Norman castle. That extending from the west is also very strongly fortified wherever the nature of the ground admits, while the defences of the eastern enclosures are

not very strong. That between the eastern enclosure and the keep appears to have been purposely made rough, and crossed with deep trenches, in order to render the approach to the rectangular fortification as difficult as possible.

There is one feature of this very remarkable relic of antiquity to which I have not yet adverted; I mean those curious circles of from twenty-eight to thirty feet in diameter, which Mr. Rutter mentions as existing in considerable numbers towards the western extremity of the fortification, and considers them difficult to be accounted for. These, though no doubt many of them have been disturbed and nearly obliterated, by the planting of the area, may still be seen as described by him, and are undoubtedly the foundations of the huts in which the primitive inhabitants of the place resided more than two thousand years ago. Wherever the site of a British town is ascertained, the area of which has escaped mutilation either from tillage or planting, these circles are almost certain to be found. The most perfect specimens of which I am aware, are those on Dartmoor, whose fastnesses offered little temptation to foreign invaders, while the unproductive nature of the soil has preserved them from the ravages of the plough and spade. These primitive habitations appear to have been constructed by forming a circular excavation of a few feet in depth, the sides of which were built up of loose stones, without mortar, and the floor was probably formed of earth or clay trodden hard. These walls appear to have been raised but a small height above the surface of the ground, most likely on account of the instability of dry walls, unless built of far more substantial proportions than these seem to have been. A frame-work of wood seems to have been raised on

BRITISH MUSEUM

Woodley Lith. Taunton.

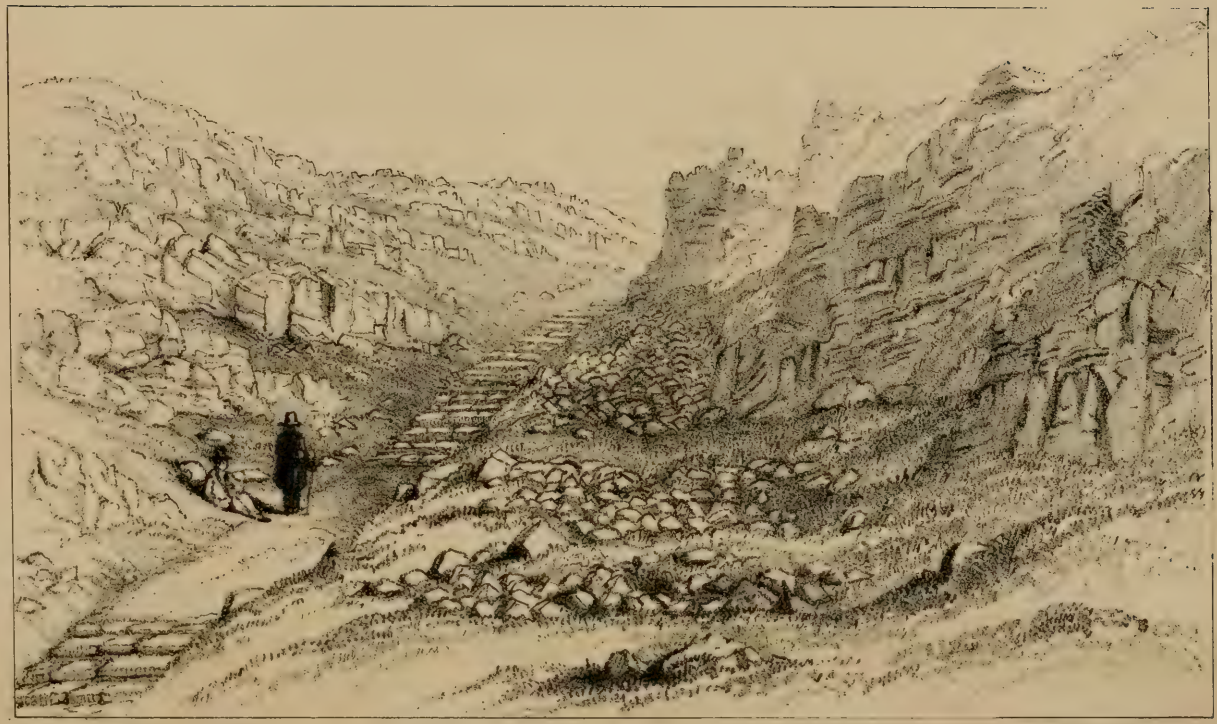
HUT CIRCLE ON WORLE HILL.

them, most likely filled with wattle or wicker-work, or perhaps merely interwoven with brush-wood, and the whole was finished with a roof either of thatch or turf, which might have had an opening in the centre, serving the purpose of a chimney. How these huts were lighted or ventilated it is of course, at this distance of time, useless to enquire.

It is a curious fact that Catlin, in his work on the American Indians, gives a sketch of the site of an ancient Mandan town, (which tribe, from some peculiarity in their language, he supposes to be of Celtic derivation,) representing a place which, if an antiquary were to meet with on one of our hills or downs, he would at once pronounce it to be a British village; and gives the following account of the construction of their lodges, probably not unlike that common among the Celtic inhabitants of Britain before the time of its occupation by the Romans. He says—"Their village has a most novel appearance to the eye of a stranger. Their lodges are closely grouped together, leaving but just room enough for walking and riding between them, and appear from without to be entirely built of dirt; but one is surprised when he enters them, to see the neatness, comfort, and spacious dimensions of these earth-covered dwellings. They all have a circular form, and are from forty to sixty feet in diameter; their foundations are prepared by digging some two feet in the ground, and forming the floor of earth, by levelling the requisite size for the lodge. These floors or foundations are all perfectly circular, and varying in size in proportion to the number of the inmates, or the quality or standing of the families which are to occupy them; the superstructure is then produced by arranging inside of this circular excavation, firmly fixed in the

ground, and resting against the bank, a barrier or wall of timbers, some eight or nine inches in diameter, of equal height (about six feet), placed on end, and resting against each other, supported by an embankment of earth raised against them outside; then, resting against the tops of these timbers or piles, are others of equal size and equal numbers, of twenty or twenty-five feet in length, resting firmly against each other, and sending their upper, or smaller ends, towards the centre and top of the lodge, rising at an angle of forty-five degrees to the apex or skylight, which is three or four feet in diameter, answering as a chimney or skylight at the same time. The roof of the lodge being thus formed, is supported by beams passing around the inner part of the lodge, about the middle of these poles or timbers, and themselves upheld by four or five large posts, passing down to the floor of the lodge. On the top of and over the poles forming the roof, is placed a complete mat of willow boughs, of half a foot or more in thickness, which protects the timbers from the dampness of the earth with which the lodge is covered from bottom to top, to the depth of two or three feet, and then with a hard and tough clay, which is impervious to water, and which with long use becomes quite hard." Now whether the Mandans be of Celtic origin or not, it is interesting to observe the similarity of customs among two nations in a state of nearly primitive simplicity; the one living on the banks of the Missouri in the nineteenth century; the other on the coast of the British Channel, perhaps some centuries before the commencement of the Christian Era; for with the exception of the covering of earth, which on the top of Worle Hill it would have been no easy matter to procure in sufficient quantities for the purpose, the construction of the British hut must have

NATURAL HISTORY



From Nature and on stone by V. H. Hair.

Printed by Woolley, Taunton.

been very similar to that of the Mandan lodges, and I cannot help thinking it possible that some of those circular barrows which are depressed in the centre, may not be sepulchres, as is generally supposed, but the remains of huts constructed as here described, the earth of which has sunk in when the timber which supported it became too much decayed to sustain its weight. Now the fortified area which I have described, would no doubt accommodate a closely packed population of from fifteen to twenty thousand persons, whose cattle might be tolerably secure within the outer enclosure, while the western extremity of the hill, protected by the massive ramparts of the rectangular fortification, occupying as they do the whole extent of the narrowest part of the hill, would afford an almost impregnable residence for themselves and their families. But it is not likely that the whole population constantly resided within these formidable ramparts; for there are traces of earth-works, and even some of these circles, to be found much to the east of the outer enclosure; and it is most likely that a straggling village at one time extended as far as Kew steps, to the east of which may be traced the remains of another rampart, which seems to have extended quite across the hill.

The very curious pass known by that name is one of the most remarkable features of Worle Hill. It consists of a flight of upwards of two hundred steps, leading from the top of the hill to the little village of Kewstoke, and probably beyond it to the sea, which 2,000 years ago no doubt extended farther on that side than it does at present, and I think may safely be pronounced to have been the great landing place of the British town.

A glance at the formation of the hill will serve to show that it would be very difficult to land any where to

the west of Kewstoke. Anchor Head is too small and too rocky, to have been the only approach to a town connected with the Phœnician, or Carthaginian trade, while the beach at Kewstoke would afford a safe and convenient locality for the small craft in use in those days. At the top of the highest slope of this pass may be traced a considerable foundation analogous to those on the hill, though not circular, which I conceive to have been a military work intended to command and defend the most practicable approach from the sea, on this side of the hill. It is popularly supposed to have been the residence of a British or Saxon Saint, of the name of Kew; but I am irreverent enough to consider that this very apocryphal worthy, if indeed such a person ever existed, had no more to do with Kewstoke, than Saint Conger had with giving name to the neighbouring town of Congresbury. Kongar means King, and Bury signifies town. I believe the large wood in the neighbourhood of Congrebsury is still called Kingswood, and that the name of the place translated into English, is simply Kingston; in the same way Kewch is Celtic for a boat, and Stoke means station; and Kewstoke signifies the station of the boats, which I believe were much more likely to give a name to the village and the stairs than any saint, whether real or imaginary.

I feel that I ought to apologize for the length to which I have extended my gropings in the dark, but I am sure that now I have done my best, or my worst it may be, to clear up the history of Worlebury Camp, I have left obscurity enough to satisfy, as I have said before, the most imaginative mind that ever took the unknown for the wonderful.

Since this paper was read, the following discoveries have been made within the area of Worlebury Camp, chiefly under my superintendence. Having obtained permission

from Mr. Pigott, the owner of the property, I commenced my labours on Thursday, October 16th, by clearing out a square space where there was the appearance of dry walls, thinking it possible that it might be the entrance to a well; in this however I was disappointed, as it turned out to be a rectangular excavation in the rock about sixteen feet long from east to west, and about thirteen from north to south; having a facing of dry masonry on the north, east, and west sides, that on the north about two feet eight inches in height, the other two sloping to the south with the natural declivity of the hill, the south side being only the natural rock without any facing of masonry, and only a few inches deep. The floor is composed of the solid limestone of the hill, and seems to have been very imperfectly levelled. For what purpose this chamber was constructed I cannot form a conjecture, at first I thought it might be a tank for water, but the floor being of mountain limestone, renders this improbable. On the following day I proceeded to clear out one of the hut-circles, of which there is a great number within the ramparts. It proved to be a rude excavation in the solid rock about six feet deep, and rather more in diameter, and with the exception of a few fragments of very coarse pottery, and a little wood having much the appearance of charcoal, contained nothing of interest. On the next day I was unavoidably absent, but the work was continued under the superintendence of Mr. Atkins, Dr. Tomkins, and Mr. Bailward, and on clearing a similar hole, at about five feet six inches below the surface of the ground, was found a skeleton lying on the right side, with the head to the north west. This skeleton, though in a very decayed state, was nearly perfect with the exception of the lower part of the legs, which had disappeared. On cleaning the scull three cuts entirely penetrating the bone,

and evidently inflicted by some heavy and very sharp weapon, were discovered; the collar bone and the left arm, a little below the shoulder, also bore the marks of severe wounds, apparently from the same cutting weapon; there was nothing else of interest in this hole. On Monday however, on opening another circle very near this, at the depth of three feet six inches from the surface, they found the rock faced with dry masonry in a nearly circular form. From the top of this masonry to the solid rock at the bottom, was on the east side twenty-three inches, on the west twenty-seven, on the north twenty-four, and on the south twenty-three; the diameter of this circular chamber was in the broadest part four feet six inches, and in the narrowest, three feet eleven inches, the total depth of the excavation being about five feet six inches. About four inches below the top of the masonry were discovered the remains of two skeletons, lying almost across each other, the head of the upper one nearly south, and that of the lower west-south-west; they were lying on their sides, with their legs drawn up. About six inches lower a third skeleton was found, the head lying nearly due north. One of these skeletons bore marks of great violence, the skull being gashed with a sharp cutting instrument, and fractured by a large stone which lay upon it; part of the collar-bone was driven up into the arch of the under jaw, and the left thigh was severely wounded. Under this skeleton was a quantity of dark mould, then a layer of broken stones, then thin plates of lias, a stone not found on Worle-Hill, under which, immediately upon the rock, was a quantity of wheat mixed with a little barley, quite black, but whether from the action of fire, or from decay, is not certain. With the skeletons were a few horses' teeth, and mixed with the grain some

small bones, apparently those of birds. During the remainder of the week several other circles were opened, in most of which were found small fragments of coarse pottery, bones of various animals, some of which appear to have been burnt, pieces of blackened wood, but no masonry or anything of much interest. The deposits in all are nearly the same; first, earth washed from the surface; then, rubble and pieces of rock, to the depth of about five feet; then, black earth, with fragments of wood; then, broken stones, and, lastly, the solid rock.

On Saturday was found the skull of a pig, the back part of which, being close to the rock, showed that it must have been separated from the carcase before it was deposited in the hole; with it were many fragments of coarse pottery, some blackened wood, and a small piece of spar, which appears to have been rubbed down at one end, and might perhaps have been used as the head of a small arrow. In the early part of the week, a large circle of fifty feet in diameter, occupying nearly the centre of the place, was searched, but it proved to be merely superficial, the solid rock being but a very few inches below the surface. Near the centre of this circle were found many fragments of pottery, of very coarse and rude texture. On Monday, the 27th, we found some coarse fragments of pottery, bones of various animals, and a piece of spar similar to that before mentioned. On Tuesday, at about five feet from the surface, we found the jaw of a pig and a few bones, and a little lower a human under jaw, the atlas vertebra, the bones of one arm and hand, and those of the right foot, in a very perfect state. This hole was not nearly so dry as most of the others, and those bones only were preserved which had fallen in the least damp spots; enough however remained to shew that

the skeleton was lying on its face ; and about eight or nine inches below the jaw, lay an iron spike about four inches long, which appears to have been the head of a dart or javelin, with which weapon the man might have been killed, and have fallen forward into the excavation. Under the skeleton was the usual deposit of black mould, and pieces of stick, such as might have been used in the construction of a wattle roof, under which was a large quantity of wheat and barley, which seems to have rested upon a flat board, the two sorts of grain having been kept separate from each other by thin pieces of wood placed between them. With this grain was found a small piece of what I at first thought to be a coarse straw plait, but which, on closer inspection, appeared to be part of a sedge mat, or perhaps basket, in which the grain might have have been kept. The investigation of this curious store was not completed till Thursday, when another excavation was opened. In one corner was a ledge of rock, which might have served as a seat, on the left side of which were the fragments of a large earthen vessel, and on the right a small store of grain. Near the bottom of this hole was found part of a very small ring, apparently of bronze, and quite down on the floor, almost forced as it were under a projecting ledge of rock, apparently put away with great care, two rings of iron about an inch in thickness, and about the same in diameter. On Friday nothing was discovered, but on Saturday, in the last circle which has been searched, we found many bones of animals, a good deal of broken pottery, and just above the floor a piece of iron about eight inches in length, which, though quite rusted through, appears to be the head of a large spear. Besides these remains, we have found a great number of pebbles, all nearly of the same size, which, as the hill is nearly

three hundred feet above the sea, must have been brought there on purpose; and many pieces of red earth, apparently containining ochre, one of which appears to have been rubbed down into the form of a small egg.

Now the question naturally arises,—to what date and to what people are we to ascribe these curious relics of antiquity? and though we have as yet made but small progress in our investigations, I think we even now possess data sufficient to justify us in hazarding a guess; for a mere guess at present it must be, as to both these points. I am inclined then to think, that they are relics of two distinct dates, separated from each other by an interval of several hundred years. From the extreme coarseness and rudeness of the pottery, as well as the state of almost decomposition in which, while wet, some of it appeared to be, I am inclined to think that the greater part of it, together with the iron rings, (which were found put away with great care at the very bottom of the corner of one of the excavations, and the use of which, unless they were analogous to the ring money, which we know to have been in use before the introduction of coin, it would be difficult to understand,) are the relics of the early inhabitants of the place, whether Hædui or Belgæ, and more ancient than the time of the Roman invasion. As far as I can judge, with the exception of one very diminutive fragment of black ware, nothing has been found in the slightest degree indicative of Roman occupation; not a fragment of brick, not a single coin, have we met with; from which I conclude that the place was deserted from the time that Ostorius Seapula took military possession of the country from the Avon to the Parret, in the reign of the Emperor Claudius, —that the British inhabitants, reduced to slavery by their conquerors, and having learned to construct better habita-

tions than subterranean huts, had left Worle Hill for Axium, on the other side of the bay; and that their original habitations, having fallen into decay, soon became open holes, the wattle or brushwood roofs of which, having fallen in, afforded the material of the layer of dark mould mixed with pieces of stick, which we have almost invariably found in every one we have opened.

In the course of four hundred years, under the Roman tyranny, the Britons became a degraded and enslaved, though highly civilized people; nor, if we may depend upon the lugubrious history of Gildas, was their situation much, if at all, improved under their own chieftains after the departure of the Romans from their country. On this miserable, though civilized and christian people, the flood of Saxon invasion burst like an overwhelming torrent, and a contest for life and death took place between the invaders and the Bretwallas, or British Welsh, as they are called in the Saxon Chronicle, which raged through the greater part of the fifth and sixth centuries. At length, in the year 577, Ceawlin, the West Saxon conqueror, overran this part of England, gained a great battle at Dyrham, slew three British chiefs, Conmail, Farinmail, and Condidan, and took the cities of Bath, Gloucester, and Cirencester. Now one of the skulls found, bears the marks of wounds such as no Celtic weapon that I have ever seen, could have inflicted; nor is the short stabbing sword of the Romans at all more calculated to give such awful gashes, while the Saxon broad sword is the very weapon for the purpose.

Again, neither the primitive Britons,nor the early Saxons, were slaves; but the Romanized Britons were reduced to the most abject servitude; and, as I have before said, their situation was but little improved after the departure of the

Romans. Now the cartilage between two of the lumbar vertebræ of one of the skeletons discovered, (evidently not of an aged person,) is ossified, which I am informed could hardly have been caused in a person of no great age, except by toil so severe and constant, as to render it probable that it is the skeleton of one who worked under the lash of a task-master. In the south rampart, there is an evident appearance of a breach, and at no great distance from it these skeletons were discovered. It seems therefore to me not improbable, that some of the unhappy Romano-Britons, in the year 577, took refuge in this stronghold, and that the corn and pigs may have been part of their slender stock of provisions; that the place was taken by storm, and that in the desperate contest which ensued, some of the slain fell into the open holes which marked the sites of the primitive huts, and their bones being in some degree sheltered from the weather, have been preserved to the present time, while those left upon the surface have yielded to decomposition and entirely disappeared, that in the lapse of twelve hundred years, the holes have, partly by accident, and partly by design, (when in later days the hill became a sheep walk,) been filled up with earth and stones, till the only vestiges remaining of them, are the low circular mounds and slight depressions which are found in such numbers within the area of the fortified town, a few of which have now for the first time been explored.

Lullington Church.

BY THE REV. D. M. CLERK.

THE small church which I am about to introduce to the notice of the members of this society, is that of the parish of Lullington. It is situated in the county of Somerset, and diocese of Bath and Wells, in the archdeaconry of Bath, and the deanery of Frome, from which latter place it is distant three miles, in a northerly direction. The river Frome, waters the lower part of the parish.

Lullington is mentioned in the Domesday Survey, under the name of "Loligtone," and appears to have been granted by the Norman Invader, to the bishop of Coutances. It was held in the time of Edward the Confessor, by Earl Harold, and stated then to have been worth £4; but in the time of William the Conqueror, 100 shillings. Afterwards the manor, with the advowson of the church, (held of the duke of Lancaster, as of the manor of Trowbridge,) was conferred on the priory of Longleat, in the county of Wilts. At the dissolution of that priory, (29 Henry VIII.) it was granted to John, prior of the Carthusian monastery at Hinton, in the county of

Somerset; but the succeeding prior ceded it to the king, who, in the thirty-second year of his reign, (1541) granted it to the earl of Hertford, who the next year (1542) sold it, with the Longleat estate, to Sir John Thynne, from whom it descended to the late Thomas, Marquis of Bath, and has now passed into the hands of the proprietor of the neighbouring park of Orchardleigh, — Cox, Esq. The present incumbent is the Rev. W. M. H. Williams.

The CHURCH which we are describing, is one of those puzzling and curious buildings which have the tower between the nave and the chancel, without any visible signs of transepts. Its ground plan consists of a Nave, a Tower, and a Chancel, with an aisle, transept or chantry, (as you may please to call it,) on the South side, with a South porch adjoining the chantry, west of it; the chantry and porch together filling up the whole length of the nave on the south side. The length of the nave, is twenty-five feet six inches; the tower, twelve feet three inches; the chancel, seventeen feet ten inches, altogether making the length from the inside east, to the inside west wall, fifty-five feet seven inches. The width of the nave, is seventeen feet two inches; that of the chancel, is rather greater, seventeen feet ten inches. The width under the tower, is twelve feet; the chapelry or aisle is nearly square, viz., fourteen feet, by fourteen feet three inches.

The whole of the CHANCEL (I begin at the East, following the Camden scheme in my description,) appears to have been added during the Decorated period; probably not much later than 1320, A.D. The Eastern window is of three lights; the centre light is pointed, the other two with circular heads, and each with three foliations. On the inside, the head of the window arch is finished off very prettily, with a moulding which loses itself in the wall

just where the arch stops and the jamb begins. In the furniture of the chancel there is nothing remarkable. There is a piscina, with a trefoiled orifice and no shelf, but of poor workmanship. On the North side is one good decorated window, with a square head. On the South side there are two windows, the one square-headed, and corresponding with that on the North side ; the other a small one of two lights, and of plain Decorated character. The wall in which this window is inserted, projects six inches beyond the face of the other portion of the wall, and may have been a part of the old Norman building. The width of this window is only two feet nine inches to the outer edge of each splay, and the height is four feet nine inches also to the edge of the splay, which splay (wide, not deep,) is about nine inches all round. The keystone has apparently dropped, which makes it appear as if it were a round-headed arch. This window I consider to be very curious ; I know not what to make of it, nor what was its use.

The Piers which support the tower towards the chancel, are Norman, but they do not correspond, singular to say, the one with the other. That on the north side, is adorned with three shafts, while the pier on the south, has only two. The capitals of the principal shafts, are rather more ornamented than the other, but all of them may be described as *plain*. The third shaft on the north side therefore, stands out from the wall at present, supporting *nothing*. As to whether or not the wall was originally thicker and cut away, together with the shaft on the South side, I will not undertake to decide; but this appears to me the most probable solution of the matter, from the circumstance that the *arch* which both piers support, is pointed; and there is on the south side, close to the pier, a doorway

TOWER ARCHES, LOOKING EAST.

LULLINGTON CHURCH

leading into the staircase turret, which doorway and staircase are of far more modern construction. The arch from the tower to the chancel, is much earlier,—so much so, that, were it not for the corresponding arch into the nave, (which I shall presently describe,) it might admit a doubt whether it were not the original construction. I am myself inclined to place it in the Early English period, towards the Decorated era.

The arch into the nave is good, and very singular. It has but few mouldings, and is pointed. On each side, portions about three feet from the pillars on the nave side, are carved with Chevron ornament, and this ornament stops (in my opinion) as if the crown of the arch had once been *round*, and altered from *round* to *pointed*. The piers which support this arch, are very similar to that under the south side of the chancel arch, the secondary shafts being twisted. One, (the south-west shaft) was restored very fairly about twenty years ago.

The south aisle, or chantry, is separated from the nave by a very good plain chamfered *late* Early English arch, verging on Decorated. The piers, or rather pillars, which support it, are very good, the capitals boldly carved with foliage. The shafts touch the wall, but are separate from it. There is one pillar only on each side, of dimensions well proportioned to the size of the arch, and the weight of capitals it has to bear. The East window of this aisle is good, with a drip or string-course round it, which is stopped by a corbel on the North side; that on the other side is gone, if there ever was any. The window is of two lights, connected at the top by a quatrefoil circle; the two long lights have no foliations. I should suppose its date (and in fact that of the whole of this part of the chantry) to be about 1280, A.D., earlier, by some thirty

years at least, than that of the chancel. The South window is much mutilated; the drip remains, with the westernmost corbel. It was formerly of three lights, and of the same date as the window I have just described. There is a *piscina* showing that there was once here a chantry altar. Its top is mutilated, but the bottom is boldly cut, and projects from the south wall ten inches. There is also a plain niche on the south side of the east wall, and a corbel-crowned head on the west side of the piscina, which may be a bracket; or it may be the finish of the drip of the south window, brought round to serve as a bracket.

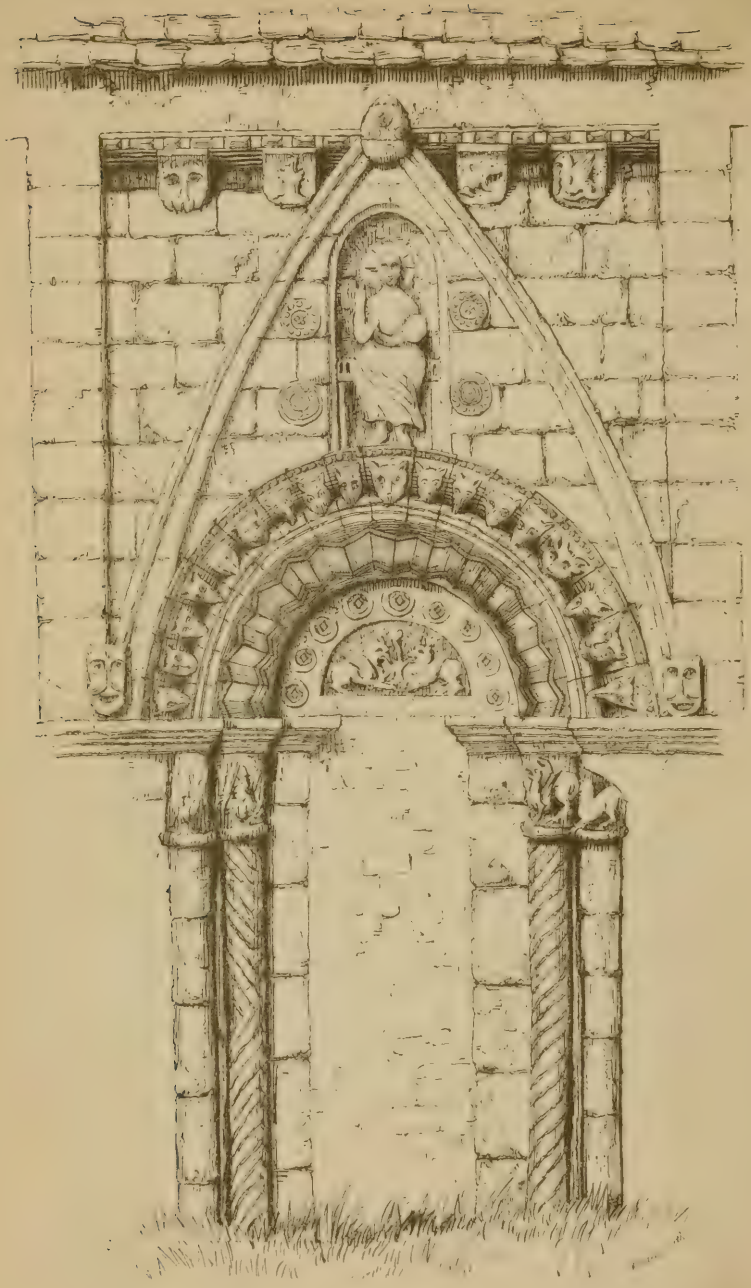
The FONT is very curious, situated under the Tower. It is circular, of an early Norman date, and figured in "Britton's Architectural Antiquities." It bears this inscription, carved in Roman letters:

"HOC FONTIS SACRO PEREUNT DELICTA LAVACRO."

There is an Inscription on the edge, of which I give a copy, but can make nothing of it.

The TOWER itself is square and low, and of three stages. The windows, both on the north and south sides of the lower stage, are square-headed Decorated, and of two lights, and correspond with those in the chancel. The windows in the upper or belfry-stage are rather early Perpendicular, and are filled with stone, pierced in quatrefoils. The tower is surmounted by a plain Perpendicular battlement of good character; the pinnacles are gone, which must have given to the tower a crown-like appearance; their bases project beyond the surface of the tower. The string-courses are good, the upper one adorned with bold gurgoyles. The groining of the Tower is gone, and all the roofs are plastered inside.

BRITISH MUSEUM



NORTH DOORWAY, LULLINGTON CHURCH

The Beacon or staircase-turret, is octagonal, and on the south-east angle ; the line of beacon *south*. The staircase, which is spiral, enters (as I mentioned) at the South-East corner inside the Tower, the pillar being cut away (as I suppose) to make room for the chapelry. The cap of the turret is flat, and formed of three stones, fitting in and probably intended to support the beacon fire. The thickness of the walls is, North and South, two feet eight inches only,—east and west, two feet eleven inches. The general character of the Tower is low and flat. Query—pared away ?

The West window is small and poor ; the tracery cut out, the opening may be Norman.

The entrances are on the North and South sides. The North doorway is an exceedingly curious specimen of Norman work. It is figured by "Britton." It is composed of three members. The interior member of the arch is flat, and ornamented with a sort of flower ; it is supported under the impost-moulding with a kind of square jamb. The second member is a series of well-cut chevrons, the points of the chevrons project outwards. It is supported under the impost by twisted columns. The capitals are carved with animals of some kind. The third member of the arch is ornamented with what I believe is usually termed the bird's beak moulding, though in this case the carved heads are not those of birds. On either side of this moulding is a bead ornamented with dots. It is supported under the impost on the east side by a plain shaft with a cushion-capital ; on the other side by a similar pillar with a capital carved with a centaur. The crown of the arch above the impost-moulding is filled up with a single stone, on which is carved two animals supporting, or fighting for, a Cross. Perhaps

some Antiquarian may explain the device, which is not uncommon in Norman doorways. I have supposed it to be a representation of a Lamb holding a Cross, and combating with the Power of Evil. Over the doorway is a niche, in which is a figure, probably of the Deity, a nimbus round the head, and with one hand held up, as in the act of blessing, or, it may be, holding a sceptre ; the other hand held a figure, perhaps that of the Son. There are four annulets sculptured around the niche, two on each side. Then follows a very singular drip (supported on queer corbel-heads) running for some inches above the impost-moulding, and enclosing both the arch and niche, extending to the corbel-tabling. It has no regular form whatever, and what arch it was meant for I cannot say. The South porch forms the principal entrance; the porch is of poor late Perpendicular, with a small West window, square-headed, and trefoiled. The inner doorway is Norman, quite plain ; but good, and the arch here is again filled up from the impost-moulding with a flat stone, which has a circle upon it. I would call attention to this doorway, as being the origin of the doorways with a square opening, we so often find. The chancel doorway on the south side is very flat, with an ogee head and drip, the opening, trefoiled. The buttresses to the nave on the north and west sides, are flat; Norman pilasters, projecting seven and nine inches respectively, finishing on the North side under the corbel-table. The church has no parapets. The corbel block-table is the only moulding except the "set off" close to the ground. There is an elaborate Cross fleury on the gable of the South chapelry. The buttresses of the chancel are bold, and set angle-ways, running about two-thirds of the height of the Walls.

The Illustrations to this paper are executed by Mr. T. H. Hair on stone, from original sketches by Mr. C. E. Giles.

FONT, LULLINGTON

St. Cuthbert's, Wells.

BY MR. B. FERREY.

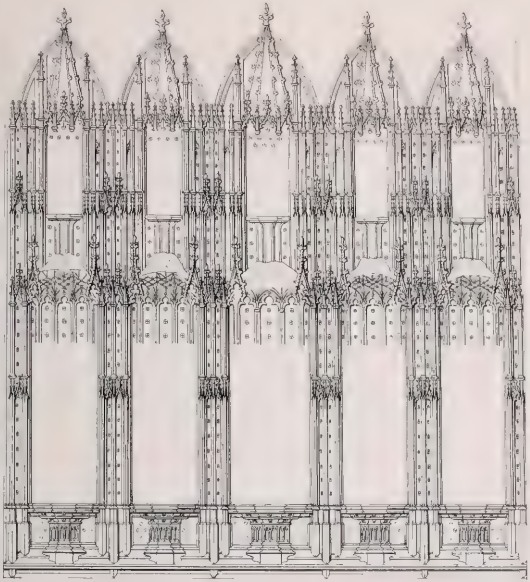
ST. CUTHBERT'S Church is a large and very interesting building, chiefly of the Third Pointed Period, and possessing the usual characteristics of churches in Somersetshire. The nave piers, and some of the windows, are of earlier date; and the weather-mould of the original roof is still visible on the east side of the tower, inside the church.

The church consists of a west tower, nave, and aisles, with chantry chapels both on the north and south sides. Transeptal chapels have also been added on the north and south sides, in which the reredos, the drawings of which are submitted to the meeting, were discovered. There are porches on the north and south sides of the church, each having a parvise over. The chancel has aisles; and the sacristy, on the north side, is original. The tower of the church is well known as one of the finest examples in Somersetshire. The first of some interesting discoveries was made about last August in one of the chapels before mentioned, on the north side of the nave (dedicated to the Holy Trinity), and consisted of a fresco, life size, of our Blessed Saviour, clad

in a russet-coloured garment, with a red cloak on his shoulders, and holding in his left hand an orb surmounted by a cross—his right hand in the act of benediction ; the feet were bare. The monogram ihc m'cy repeated ten times on the ground of the fresco ; at the foot are the words '*Salvator Mundi*,' and over the head of the figure, an angel with outspread wings, holding a shield with the five wounds, on an azure ground. The fresco, when first discovered, was, I am informed, in a very dilapidated condition, parts of the colouring having since been restored. Eastward of this chapel, and immediately adjoining it, is one of the transeptal chapels, dedicated in honour of the Blessed Virgin. On the east wall of this, the reredos was accidentally discovered by the removal of some panelling.

It will be seen by the drawing that the design was most magnificent, the groining of the niches being of peculiar richness, and the execution of the whole work exceedingly delicate and beautiful. The centre of the lower range of niches is larger than the others, and probably contained the figure of the Blessed Virgin ; the groining of the canopy was very different from the others, and was much richer. The centre of the upper range of niches may probably have contained the figure of our Saviour ; the sacred monogram being there several times introduced.

In this, as in the reredos on the other side of the church, the niches were found filled with fragments of figures, all more or less mutilated, and with their faces turned to the wall, to give a smooth surface for the plastering by which they were concealed from view. In one of the windows on the north side of the chancel, which had been filled up to receive some plastering and panelling, were also found an immense number of fragments of figures, canopies of niches, pinnacles, and other ornamental portions. Every



F T Dollman. del[t]

ELEVATION OF REREDOS

AT EAST END OF LADYE CHAPEL

S[t] CUTHBERT'S CHURCH, WELLS, SOMERSET

SCALE OF 0 1 2 3 4 5 6 7 8 9 10 FEET

one of the figures was headless ; and it is observable that those on which iconoclastic fury had been principally bestowed, were the Blessed Virgin and the figures of ecclesiastics. Many of these were of great beauty, and the colouring and gilding were as fresh and bright as though only recently executed. At the time I was at Wells, no attempt had been made (or rather had only just begun to be made) to classify and arrange them ; but I have no doubt that since October last, (the period of my visit to Wells,) some progress has been made in ascertaining the appropriation of the various fragments.

The blue lines in the upper canopies on the drawing indicate a presumed restoration of those portions, the whole of the projecting parts having been of course removed, to make a smooth face for the plaster. The lower range of niches present indications of what seems to me a great singularity, viz. of having had *double* canopies. On one of the compartments I have ventured to show something of what I conceive to have been the design, leaving the other compartments as they exist at present. The colouring and gilding generally is somewhat dilapidated, but enough remained to enable me to make a restoration.

The reredos on the south side of the church is altogether of very different design, as will be seen by the drawing, and, as I think, of later date than the other. It was discovered nearly at the same time with that in the Lady Chapel. The chapel in which it exists is known both as St. Cuthbert's Chapel and as Tanner's Chantry ; on the south side, on the removal of some plaster, was found a mural inscription, in black letter :—'Anniversare Thomae Tanner est in festo Ste. Katerinae.' The recumbent figure of Jesse was evidently very boldly and beautifully executed, but, with the exception of the feet and

some portions of the drapery, little more than the outline remains; traces of the stem issuing from his body exists, and are shown in the drawing. The design of this reredos has not so much variety as the other, the niches being exactly similar in every instance, and the execution not so good in some respects; a portion of it has been entirely destroyed, as will be seen by reference to the plan, on which this part is indicated merely in outline. From the appearance of the masonry of the window on the exterior, and the general clumsiness of the interior, I am induced to think it must have been brought to this spot from some other part of the building, and, after its insertion, the niches that were there previously were destroyed. Some of the figures that remain hold in their hands scrolls, with inscriptions referring to the history of Jesse and his descendants; and it may therefore be fairly assumed that they originally filled the niches in this reredos. I may add here, that no trace of the original altar exists in either instance.

A range of niches on a smaller and less elaborate scale in the east wall of the north aisle of the chancel, and a *piscina* and *sedilia* of the Middle Pointed Period on the south side of the chancel, were also brought to light, together with the original entrance into the sacristy, which had been closed up, and a modern entrance substituted. Of all these I took memoranda, but have not had time hitherto to draw them to scale. I hope to lay them before the Society at a future meeting.

In conclusion, I think it right to add, that the churchwardens of St. Cuthbert's Church, and indeed all the officials, have shown the greatest zeal in endeavouring to preserve from further injury, to the utmost of their power, these most interesting memorials.

The Somersetshire Fauna.

(Continued.)

BY MR. W. BAKER.

Fishes.

ACANTHOPTERYGII.

PERCIDAE.

Perch. *Perca fluviatilis*

Basse. *Labrax lupus*

Couch's Polyprion. *Polyprion cernium*

Great Weever. *Trachinus draco*

Lesser Weever. *T. vipera*

Striped Red Mullet. *Mullus surmuletus*

FISHES WITH HARD CHEEKS.

Sapphirine Gurnard. *Trigla hirundo*

Piper. *T. lyra*

Grey Gurnard. *T. gurnardus*

Shining Gurnard. *T. lucerna*

Miller's Thumb. *Cottus gobio*

Short-spined Cottus. *C. scorpius*

Long-spined Cottus. *C. bubalis*

Armed Bullhead. *C. cataphractus*

Rough-tailed Stickleback. *Gasterosteus trachurus*

Half-armed Stickleback. *G. semiarmatus*

Smooth-tailed Stickleback. *G. leiurus*

Ten-spined Stickleback. *G. pungitius*

Fifteen-spined Stickleback. *G. spinachia*

SPARIDAE.

Braize. *Pagrus vulgaris*

Sea Bream. *Pagellus centrodontus*

SCOMBERIDAE.

Mackerel. *Scomber scomber*

Sword-Fish. *Xiphias gladius*
Scad. *Caranx trachurus*
Dory. *Zeus faber*
Boar-Fish. *Capros aper*

RIBAND-SHAPED FISH.

Red Bandfish. *Cepola rubescens*

MUGILIDAE.

Grey Mullet. *Mugil capito*
Thick-lipped Grey Mullet. *M. chelo*
Atherine. *Atherina presbyter*

GOBIOIDAE.

Gattoruginous Blenny. *Blennius gattorugineus*
Double-spotted Goby. *Gobius bipunctatus*
Spotted Goby. *G. minutus*
Gemmeous Dragonet. *Callionymus lyra*

FISHES WITH PECTORAL FINS, FEET-LIKE.

Angler. *Lophius piscatorius.*

LABRIDAE.

Ballan Wrasse. *Labrus maculatus.*
Green-streaked Wrasse. *L. lineatus.*
Blue-striped Wrasse. *L. variegatus*
Three-spotted Wrasse. *L. carneus*
Comber Wrasse. *L. comber*
Gilt-Head. *Crenilabrus tinca*
Goldfinny. *C. cornubicus*
Gibbous Wrasse. *C. gibbus*

ABDOMINAL.

MALACOPTERYGII.

CYPRINIDAE.

Common Carp. *Cyprinus carpio*
Crusian Carp. *C. gibelio*
Gold Carp. *C. auratus*
Gudgeon. *Gobio fluviatilis*
Tench. *Tinca vulgaris*
Roach. *Leuciscus rutilus*
Dace. *L. vulgaris*
Bleak. *L. alburnus*
Minnow. *L. phoxinus*
Loach. *Cobitis barbatula*

ESOCIDAE.

Pike. *Esox lucius*
Sea-Pike. *Belone vulgaris*
Sawry Pike. *Scomberesox saurus*
Flying-Fish. *Exocetus volitans*

SALMONIDAE.

Salmon. *Salmo salar*
Bull Trout. *S. eriox*
Parr. *S. salmulus*
Common Trout. *S. fario*

CLUPEIDAE.

Pilchard. *Clupea pilchardus*
Herring. *C. harengus*
Sprat. *C. sprattus*
Shad. *Alosa finta*
Allice Shad. *A. communis*
Anchovy. *Engraulis encrasicolus*

SUBBRACHIAL.

MALACOPTERYGII.

GADIADE.

Cod. *Morrhua vulgaris*
Haddock. *M. æglefinus*
Whiting Pout. *M. lusca*
Power Cod. *M. minuta*
Speckled Cod. *M. punctata*
Whiting. *Merlangus vulgaris*
Whiting Pollack. *M. pollachius*
Hake. *Merlucius vulgaris*
Lyng. *Lota molva*
Three-bearded Rockling. *Motella vulgaris*
Five-bearded Rockling. *M. quinquecirrata*
Great Forked Beard. *Phycis furcatus*
Lesser Forked Beard. *Raniceps trifurcatus*

PLEURONECTIDAE.

Plaice. *Platessa vulgaris*
Flounder. *P. flesus*
Dab. *P. limanda*
Lemon Dab. *P. microcephalus*
Long Flounder. *P. elongata*
Holibut. *Hippoglossus vulris*
Turbot. *Rhombus maximus*
Brill. *R. vulgaris*
Muller's Topknot. *R. hirtus*
Whiffe. *R. megastoma*
Scaldfish. *R. arnoglossus*
Sole. *Solea vulgaris*
Lemon Sole. *S. pegusa*
Variegated Sole. *Monochirus variegatus*
Little Sole. *M. linguatulus*

CYCLOPTERIDAE.

Lump Sucker. *Cyclopterus lumpus*
Unctuous Sucker. *Liparis vulgaris.*
Montagu's Sucker. *L. Montagui*

APODAL.

MALACOPTERYGII.

MURÆNIDAE.

Sharp-nosed Eel. *Anguilla acutirost ris*
Broad-nosed Eel. *A. latirostris*
Conger. *Conger vulgaris*
Anglesey Morris. *Leptocephalus Morrisii*
Beardless Ophidium. *Ophidium imberbe*

ANGUILLIDAE.

Sand Eel. *Ammodytes tobianus*
Sand Launce. *A. lancea*

LOPHOBRANCHII.

SYNGNATHIDAE.

Deep-nosed Pipe-Fish. *Syngnathus Typhle*

Æquoreal Pipe Fish. *S. æquoreus.*

Great Pipe Fish. *S. acus*

PLECTOGNATHI.

GYMNODONTIDAE.

Oblong Sun Fish. *Orthagoriscus oblongus*

CHONDROPTERYGII.

STURIONIDAE.

Sturgeon. *Acipencer sturio*

Broad-nosed Sturgeon. *A. latirostris*

SQUALIDAE.

Small-spotted Dog-Fish. *Scyllium canicula*

Common Tope. *Galeus vulgaris*

Picked Dog Fish. *Spinax acanthias.*

RAIIDAE.

Skate. *Raia batis.*

Thornback. *R. clavata.*

Flapper Skate. *R. intermedia.*

PETROMIZIDAE.

Lamprey. *Petromyzon marinus.*

Lampern. *P. fluviatilis.*

Pride. *Ammocœtes branchialis.*

Notes on the foregoing List of Fishes.

FISHES of many kinds, which are taken in considerable quantities in some parts of the kingdom, at almost any time of the year, and other species which approach the shores at regular seasons in innumerable multitudes, occur on the coast of Somerset rarely, or pay their periodical visits in small parties.

The turbid condition of the water of the Bristol Channel, no doubt is unfavourable to fishes which live much in the deep and clear sea.

The well known PERCH, is a beautiful fish both in form and colour, and is very abundant in fresh water rivers,

canals, and large ponds. This species has been taken in some parts of the kingdom more than six pounds in weight; in this county it seldom exceeds two pounds.

The BASSE is often taken on the Somersetshire coast. I have seen specimens weighing twelve pounds, brought from the estuary of the Parret, but the general size in the market is from half a pound to three pounds. It is a handsome fish, but not brilliantly coloured, of a chaste silvery hue, becoming gradually lighter and brighter from the back to the belly. This is the Lupus of the Roman poets.

COUCH'S POLYPRION was imperfectly known as a British species when Mr. Yarrell published his "History of British Fishes," but the supplement to the work cleared up the obscure parts of its history. It is not uncommon on the Devon and Cornish coast, and it occurs on ours nearly three feet long. I found in the stomach of one from the estuary of the Parret, a perfect and good sized *sepia officinalis*. In the Mediterranean this fish is common, and is sometimes taken one hundred pounds in weight. The colour is plain and dull.

The two species of TRACHINUS are taken on our coast, but are never abundant there. *T. vipera* is the rarer.

STRIPED RED MULLET is sometimes taken at the mouth of the Parret, but very seldom, and not large.

Of GURNARDS, we have several species on our coast, but none of them in any considerable numbers. I have met with the Shining Gurnard in Bridgwater market, but am not quite certain that it was taken on our coast.

We have four of the five British species of COTTUS. The Short-spined Cottus and the Armed Bull-head are often brought to market with shrimps, and the Long-spined Cottus with sprats.

We have all the STICKLEBACKS described in the "History of British Fishes," except the Short-spined Stickle, but it is doubtful whether they are all distinct species. The Fifteen-spined Stickleback is often brought to market with fish from Stolford, especially at the end of April, when I have found them full of roe and milt.

The SPARIDAE are rare on the Somersetshire coast, we have only the Braize and the Sea Bream.

MACKEREL. Amongst the many species of fish that are taken in multitudes on the shores of the open sea, and occur here only as rarities, I have to mention the Mackerel, which is of so great importance at some of our fishing stations. It is recorded that a catch of Mackerel, by sixteen boats from Lowestoffe on one day at the end of June, realized £5252; and it was supposed that no less than £14,000 altogether was realized by the owners and men concerned in the fishery of the Suffolk coast at that time.

THE SWORD-FISH has been found at the mouth of the Parret. I have particulars of the capture of three specimens there, from my departed friend Mr. Robert Anstice. Two other specimens have come under my examination. I found one on the sands at Burnham in the summer of 1850, but it was so putrid that I could take only a hasty view of it; its length was more than eight feet.

The DORY is occasionally brought to market from Stolford, with other fish.

THE BOAR-FISH is very rare, but I have met with specimens in Taunton market from the south coast, and in Bridgwater market from Stolford. The figure of this fish, in Yarrell's work, is from a specimen found on a fish-stall at Taunton. The specimen in the Society's museum, was presented by F. F. Luttrell, Esq. through Mr. John Govett, of Stringstone.

Red Bandfish is rare ; a few have been taken in the estuary of the Parret. I once met with two specimens on the first of February, one sixteen inches long, with ripe roe, the other eight inches long, a male, with full milt. A few days later another female was brought to me, the ovarium of which was empty. The season of spawning is marked by this circumstance, and is probably the cause of their visiting our coast.

Grey Mullet is plentiful on the Somersetshire coast in summer. Many ascend the Parret beyond the reach of tide water, probably to spawn, as the fry of this species are found in the tributaries of the river in autumn.

Gattoruginous Blenny is often taken in the estuary of the Parret, in February and March. It probably comes to spawn, as the roe is then ripe. It is beautifully coloured and an interesting fish.

Spotted Goby is sometimes plentiful in the clay pits about Bridgwater, Tide water occasionally enters these pits.

Gemmeous Dragonet. Not uncommon. The brilliant colours which so curiously adorn these fish, I have found transferred to damp cloths in which I have wrapt them for a few hours, until I could deliberately examine them.

The Angler is not uncommon in Bridgwater Bay. Specimens of small size are often brought to market with other fish, but unintentionally, for at any age they are anything but tempting subjects for the fish-stall. The repulsive form of the Angler is expressed by some of its local names. I have had it brought from the estuary of the Parret weighing eighty pounds, with the ovarium empty.

The curious apparatus on the head, which gives it its most amiable name, is described in Yarrell's "History of

British Fishes;" and the nervous system of these appendages, and other interesting and animated remarks on the fish, are given by Mr. Couch, in his "Cornish Fauna."

The WRASSES are not numerous on our coast at any time. A few occur in May and June.

The BALLAN WRASSE is subject to great variation of colour, from a plain dull green, to a bright blue green, reticulated with vermillion and orange, and sometimes a rich red-brown, marked with blue and green.

The females have been described as plain in colour; but I have seen them of bright and varied colours, when full of roe. They are sometimes taken with mature ova in February, and in March without ova.

The CARP, eight or nine pounds in weight, is sometimes taken in the clay-pits near Bridgwater, and from the culverts under the Taunton and Bridgwater canal.

The CRUSIAN CARP has been taken in the Parret.

The TENCH is abundant and fine in most of the slow drains of the marshes, and in large ponds. It is generally full of roe in June.

The ROACH flourishes in purer water. It is abundant in fresh water rivers and canals. The *Argulus foliacius*, a very interesting parasite, is often found on this fish.

The BLEAK is not common in the western part of the county.

The MINNOW is plentiful in many of our brooks and rivers. I have found it in the tide-water of the Parret.

The JACK, or PIKE, formerly abounded in the upper parts of the Parret, and in the large drains of the county, but not so now; still it affords sport to anglers in the Avon and some other of our rivers.

The SEA-PIKE sometimes occurs in the Parret, nearly up to Bridgwater. It is often taken on our coast in summer.

Sawry Pike is rare. I have seen only one specimen, which was taken at Stolford at the end of July. It was sixteen inches long.

Flying Fish. Two or three have been found at Burnham; perhaps driven on shore by rough winds. I copy the following from Dr. Fleming's "History of British Animals":—

"A single example of *Exocetus Volitans*, or Flying Fish, was caught at a small distance below Caermarthen, in the river Towy, in June, 1765. . . . Another in July, 1823, ten miles from Bridgwater, in the Bristol Channel, a notice of which was communicated to the Linnæan Society, by the Rev. S. L. Jacob, of Woolavington."

Salmon ascend many of the rivers of the county to spawn. They visit the Parret in May, June, and a few in July and August, but perhaps not for this purpose; the condition of their roe, and the time of the year, seem to imply that some other instinct brings them into this muddy river at this season. We make the same complaint that is heard in the vicinity of other salmon rivers, namely, that salmon were formerly much more plentiful than now.

Salmon Peel, Salmon Trout, and Bull Trout of Authors, are also taken in the Parret, in its estuary, and along the coast; and the Parr and Common Trout are in most of our fresh water rivers and streams. Very many books have been written on the genus Salmo, and of late years much has been done, through careful investigation, to lessen the confusion of supposed species and varieties of this genus; but there is still much more to be done to make the subject intelligible to inquisitive naturalists. The number of species in our books is reduced,

and how many more will be found only varieties, is yet to be learned.

The PILCHARD, which is of such incalculable value in Devon, Cornwall, and other parts, is out of its proper element in the Bristol Channel, and only a few stragglers are found on our coast. The cause is perhaps the same as that which keeps away the multitudes of mackerel and other fish. Full and very interesting information on the laws made in the reigns of several sovereigns for regulating pilchard fishing, and the consequent trade, is to be obtained from Couch's "Cornish Fauna;" and accounts of the astonishing quantities sometimes taken, and their great value, are given in Yarrell's "British Fishes."

The HERRING does not visit our shores regularly in shoals; but sometimes, from September to January, large quantities are taken by drift and stake nets, along the whole line of coast westward, from the mouth of the Parret. A few are taken every autumn; and the herrings of the Bristol Channel are always delicious.

The SPRAT. This little fish affords the most valuable fishing that we have on the Somersetshire coast. Multitudes come here almost every October, and remain until January. They are caught by stake nets, chiefly at the Gore, and brought to the markets every day, and sometimes after every tide. A paragraph in the *Taunton Courier*, a few years ago, says that a ton of sprats was retailed in Taunton Market in one day; and from information which I have collected with great care, I learn that the sprat fishing, from the western extremity of the Gore to Weston-Super-Mare, will produce in a good season more than £10,000, at the retail prices.

The annual shoals of HERRINGS and SPRATS are great blessings to the poor, supplying abundance of good, fresh,

and exceedingly cheap food for two or three months in early winter ; the fish salted and dried, are much valued. Herrings and Sprats, strung and suspended in lines in cottage kitchens, are to be seen for months after the fishing season is over.

SHADS quit the sea in summer, and ascend rivers to spawn in fresh water ; they are common in the Parret.

ANCHOVIES are very fine at the mouth of the Parret, and are taken at Stolford in considerable numbers in May and June, when the roe is mature.

CODFISHES are taken nearly in every month at Stolford, but they are generally small, except in the last three months of the year, when considerable numbers of fine large fish are taken on the Gore, by hooks suspended from floated lines.

The WHITING is seldom large, but great quantities of small ones are brought to market almost constantly through the year.

The HADDOCK, WHITING POLLOCK, HAKE, and the LYNG, are taken occasionally, but they are not abundant.

The GREAT and LESSER FORKED BEARD, are found only as rareties.

The PLAICE is common, but seldom large.

The FLOUNDER or FLOOK is very abundant, and is taken at sea, in tide rivers, and in the fresh water, above the flow of tide. It is sometimes taken in clear streams far from tide rivers.

The DAB is common, but does not inhabit fresh water, like the Flounder. It feeds much on the small Mollusk, *Bulla retusa*.

The LEMON DAB is rare.

LONG FLOUNDER. Two specimens only are recorded, which were taken at Stolford, and which I sent to Mr. Yarrell, who says in his "Supplement to the History of

British Fishes," 'I have reason to believe that it is not only undescribed as a British Fish, but is altogether new to Ichthyology.'

The HOLIBUT is not uncommon on our coast; it is generally small, but sometimes a large one is taken; a specimen of thirty or forty pounds is considered large, although this fish has been brought to Bridgwater from other parts weighing more than 200 lbs.

The TURBOT is not uncommon, but it is almost always small; the same may be said of the BRILL and others of this family of fishes.

MULLER'S TOPKNOT is often taken in spring.

The SOLE is always abundant and delicious from Stolford and other fishing stations of our channel, but generally much smaller than the usual size of this fish from the shores of the open sea.

LEMON SOLE, the VARIEGATED, and the LITTLE SOLE, are rare.

LUMP SUCKER is common; the roe is mature in April; I have found it weigh one pound, thirteen ounces, from a fish of six pounds, three ounces.

EELS are abundant on the sandy parts of the coast of our channel, and in our rivers, streams, ponds, and ditches; it is our most widely diffused species of fish. ELVERS ascend the rivers in spring, they go up the Parret in March, April, and May, with the high tides, and myriads are skimmed up with fine nets at the ebbing of the tide, by the cottagers above Bridgwater.

These innumerable multitudes of little creatures, soon leave the salt and brackish water, against every obstacle, entering rivulets, brooks and drains, and occupying all the inland waters, thus providing for the constant waste of the species. Mature Eels leave the fresh water with the first

floods of Autumn, and go to sea; probably they afterwards remain on the shore, for they are found inhabiting the sands and mud between high and low water mark.

The CONGER on our coast is abundant, but seldom large. It was considered by distinguished naturalists not twenty years ago, specifically the same as the common Eel, changed in size and color by living constantly in the sea; but it is now well known that specific differences are striking and numerous; above all, that the Conger has thirty vertebræ more than the Eel. Both are now known to be oviparous, and not viviparous, as until lately believed.

ANGLESEY MORRIS. This curious and rare little fish has been often brought to me from Stolford in summer. The late Mr. Anstice met with two specimens taken in the Parret, which he sent to Col. Montagu, and an account of them was published in the Wernerian Transactions.

BEARDLESS OPHIDIUM. One specimen only has come to my hands, which was taken at Stolford, in September 1838, and I sent it to Mr. Yarrell, with two of the last named species, who wrote to me as follows: "I have your obliging letter and box with the interesting contents,—the two examples of the Anglesea Morris and the Beardless Ophidium, which I had never seen before, and as there is an example of a Bearded Ophidium in the British Museum, I shall be able to do well with this genus, in the second edition of British Fishes."

SAND EELS are found in the mud and sand between high and low water at Stolford, but not in great numbers.

The PIPE FISHES are found as curiosities; the Great Pipe Fish is most frequently taken.

The OBLONG SUN FISH has occurred in the Bristol Channel off our coast. One was washed ashore at Swansea, in 1843, which weighed 180 lbs.

The STURGEON. Very large Sturgeons come up the Parret, sometimes almost to Bridgwater, several have been taken in the river and its estuary, from 250 lbs. to 280 lbs. weight; one was taken in 1850, ten feet long, and weighed 300 lbs. These large fish are females full of roe, and generally taken in June and July. Small specimens from six to twenty pounds are not uncommon.

The DOG FISHES, SHARKS, SKATES, RAYS, &c. are only casual visitors; the thick water of the Channel is no doubt unfavourable to this tribe of fishes; the Common Skate and Thornback are the most abundant.

The FLAPPER SKATE was sent to me from Minehead, in April, 1838, by our lamented Vice President, the late Mr. Standert.

The LAMPREY, and the LAMPERN, are taken in the Parret; and the PRIDE is very common in our brooks.

On the Aptychus.

BY MR. CHARLES MOORE.

IN the present advanced state of scientific knowledge, it does not often happen that any object in Natural History remains long, without being assigned its position in the animal kingdom. This however has not been the case with a curious body called the Aptychus, respecting which there have been various speculations. For some time it was supposed to belong to the Cirripides. Professor Forbes refers it to the Holothuriadæ ; and Mr. Strickland, in a paper read on this subject before the Geological Society of London, believes it to belong to the ammonite, to which shell he considers it an *operculum ;* or else, he suggests that, like the Nautilus, the animal of the Ammonite may have required horny supports, and that these bodies may have performed that office.

It has been noticed that the Aptychus is rarely found except in beds of the secondary formations, in which the ammonite is obtained ; consequently it has not been obtained higher than the chalk, in the beds above which the ammonite is supposed to have become extinct, and not

lower than the blue lias. But it is not always the case that, where ammonites abound, the Aptychus is in equal abundance; on the contrary, there are many beds containing ammonites in great numbers, in which the Aptychus is rarely, if ever, found. This may have been accidental, or depending upon the circumstance, that the character of the beds in which they are absent was not such as to tend to their preservation, as in the case of others deposited under more favourable circumstances. In the beds of the lower lias it is occasionally found symmetrically placed in the *impressions* of ammonites, having a somewhat semicircular form, thin and wrinkled in its appearance, and of a very dark colour. In the upper lias, the Aptychus differs in form. It is there striated, and formed of two valves, somewhat resembling a bivalve shell, but without the hinge, which is always possessed by these shells. It is generally of a brown colour, and horny in its structure, but still occasionally shewing the deep carbonaceous black tint possessed by those in the beds below. In the green-sand it again alters its character, and becomes punctured and porous in appearance. The conclusion that the Aptychus might belong to shells of the Cephalopoda, was arrived at, from its association in the same bed with the ammonite, and from its being frequently found in its outer chamber. Now the mere circumstance of its being so found in the chamber of the ammonite, although presumptive evidence, I do not consider sufficient to establish the fact of its having anything to do with the animal inhabiting that shell; because we are aware that many parasitic creatures take possession of the shells of other animals and make them their place of abode. From my own observation, I repeatedly find this to be the case, and that with the Aptychus are associated many such para-

sitic shells; consequently other evidence is necessary to establish their connexion, and a few links in that chain of evidence I hope to add.

In the upper lias of the neighbourhood of Ilminster the Aptychus is frequently found, and in a condition and state of preservation which probably allows of its being better studied than in many other beds. Interposed between some beds of clay, containing a very interesting group of organic remains, there occurs a thin bed of yellow limestone, in the breaking up of which it often happens that a section of some small ammonites are obtained, and a fortunate fracture occasionally gives a view of the Aptychus lying in the outer chamber. It is also occasionally found in another way in the same bed. Now and then ammonites of a larger size were imbedded; and when this was the case, they appear to have been acted upon by water, which passing gently over them, (probably before the bed had become much hardened,) tended to facilitate the decay of the shell, leaving in many instances nothing but their casts. Curiously enough, in these casts the Aptychus is frequently left in the most perfect preservation, lying in that part of the cast that would answer to the outer chamber of the ammonite, generally symmetrically placed, and always corresponding to the size and growth of the shell they appear to have inhabited, or in which they are found. These casts also shew that before the ammonites were covered up, there were attached to them the parasitic shells I mentioned; oysters and other shells appear at times to have covered all parts of them. But there is this to be noticed, that these shells are not so often found in the interior of the chamber, as attached to the outside of the shell; and that whilst there may be a hundred oysters, there is never more

than one Aptychus; a fact which, I think, will help to establish the connexion of this body with the ammonite. Some of the ammonites containing Aptychi are so small as to be nearly microscopic, and it is not likely that shells so diminutive and young, would be selected by any parasitic creature for a habitation; or that they would by accident be washed into the deserted chambers of these shells, which with larger specimens might have happened.

I am still further strengthened in the conclusion that the Aptychus must belong to the ammonite, by the fact that I have been able to make out about ten forms or species of Aptychi from the upper lias; and I find that a particular form of Aptychus is always allied to a particular species of ammonite, a circumstance which cannot be accidental, and which has not hitherto been noticed. This latter fact will I think be considered conclusive, that this body performs some as yet unascertained functions in connexion with it. That it is an *operculum* I am inclined to doubt. The principal reason for its being so considered is, that when the valves of the Aptychi are expanded, they would cover about a transverse section of the chamber. We know that the nautilus, the animal nearest allied to the ammonite, does not possess an operculum. This animal has continued through most of the world's changes to the present time, and consequently its organization can be studied. The ammonite, although presented to us as "Medals of Creation," of many hundred species in the rocks which surround us, has no living representative; for which reason we can only speculate as to the office this body had to perform in its economy. Both these shells are chambered, and possessed of a beautiful provision for regulating their specific gravity in their native element. By means of the syphuncular tube, which passes through

all their chambers, they were able to adapt themselves to any circumstances, and sink or swim at pleasure. The difference in the two shells is not great, the principal being in the position of the syphuncular apparatus—that of the nautilus being central—that of the ammonite being situated on the outer margin of the chambers. In the casts containing Aptychi to which I have referred, there are always some traces of this syphuncular apparatus ; and in some instances the tube is in nearly perfect preservation, passing along the outer edge of the whorls of the shell until it reaches near to the position where the Aptychus is imbedded, and it appears to be of the same horny texture as is presented by the Aptychus. In the fractured sections of ammonites, where the Aptychus lies in the chamber of the shell, it is frequently with its dorsal margin pointed to, or near where the syphuncle passes; and from this, combined with the preservation of the syphuncular tube with it, I am rather inclined to the opinion that the body has something to do with the curious but beautiful provision with which nature has furnished these shells, and which further observation will probably more clearly demonstrate.

Since reading my paper at the Weston meeting, I have learnt that Von Buch has noticed the discovery of the Aptychus in a Scaphite, in a paper published in the Bulletin of the Geological Society of France ; and T. Rupert Jones, Esq. the zealous assistant secretary of the Geological Society of London, mentions the occurrence of an Aptychus holding its proper place in an Orthoceras, in their museum. Thus it has been found in three genera of cephalopida, in each of which it was destined to perform the same office.

The Somersetshire Fauna.

(Continued.)

BY MR. W. BAKER.

Reptiles.

THE number of British species of reptiles is very limited. Professor Bell, in his recent edition of the "History of British Reptiles," records only fourteen, and this small number is made up by the addition of several species unknown as British until of late years. Of these we can claim only ten or eleven for our Somersetshire Fauna.

Most people are averse to close acquaintance with these creatures, therefore little is generally known about them; but they are all, except the Viper or Adder, *Pelias Berus*, quite harmless, and very interesting to those persons who can observe and study them complacently. The amphibia are all easily reared in confinement from the ova, through all their changes, and in a clear and roomy glass vessel they are lively and amusing little things, and their development will furnish subjects of deep contemplation to the philosophical naturalist.

TESTUDINATA. CHELONIDAE.

The HAWK'S-BILL TURTLE, *Chelonia imbricata*, has been taken alive in the river Parret.

Professor Bell, in his "British Reptiles," says that "the single and purely accidental occurrence of a bird or a fish, within the range of our guns or our nets, had always constituted the wanderer fair game to our Faunists ; I have therefore determined to avail myself of the means thus offered me, of adding to our Fauna the Hawk's-bill Turtle and the Trunk Turtle, the two stray species which have been accidentally found on our coast." My inducements for claiming the Hawk's-bill Turtle for our Fauna of Somersetshire are irresistible ; namely, Professor Bell's example; the following letter from my departed friend, Mr. Anstice, written to me many years ago ; and the interesting and very apposite observations on this subject by Sir Charles Lyell, in the second volume of his "Principles of Geology."

Mr. Anstice says : "I know the circumstance of the Turtle being caught in the river Parret. It is not very probable I think, that it was assisted hither by our trading vessels from abroad. I should think they may sometimes accompany the intertropical seed-vessels and shell-fish that are yearly brought to our channel, and to the coasts of Scotland and Ireland, by the gulf stream. I have seen the species in question on the coast of Portugal, and once, I remember, in a winter month and a gale of wind ; and why should they not, therefore, take an excursion across the Bay of Biscay occasionally in summer time?"

The following are Mr. Lyell's coincident remarks : "Turtles migrate in large droves from one part of the ocean to another, during the ovipositing season. Dr. Fleming mentions that an individual of the Hawk's-bill Turtle has been taken on one of the West Zetland islands ; and according to Sebbald, the same animal came into Orkney; another was taken in the Severn, in 1774, according to Turton."

Thus we have good authority for enriching our list with the Hawk's-bill Turtle of the Parret, which came alive into my possession.

SQUAMATA. LACERTADAE.

(SAURIA.)

VIVIPAROUS LIZARD—*Zootoca vivipara.*

This is the *Lacerta agilis* of former authors, which name seems to have been misapplied, and to have belonged to another species of this genus, which is not uncommon in the neighbourhood of Poole, in Dorsetshire, and to which it is now given. Our active little lizard is common in many parts of our county. I have seen many apparently sleeping on the sunny sides of dry hedge-row banks about Bridgwater, on Quantock and Mendip, &c. and almost always in sunshine. They are readily disturbed; are very agile, and difficult to catch. If a person's curiosity should lead him to capture one of these pretty little reptiles, he must not seize it by the tail, for it values its liberty more than this appendage, and will run away, leaving it wriggling in the hand of the captor.

SAUROPHIDIA. ANGUIDAE.

BLIND WORM or SLOW WORM—*Anguis fragilis.*

This inactive and harmless creature is common all over the county, except in marshy places. This will also part from its tail when handled roughly. Its bony structure is intermediate between the lizard and the snake.

OPHIDIA. COLUBRIDAE.

COMMON SNAKE—*Natrix torquata, Coluber Natrix.*—Linn.

This beautifully marked and harmless reptile is common. The eggs of snakes are well known, clusters of them being often dug out of manure heaps and warm banks. I have kept some of them for weeks together, opening one or two occasionally for my friends' amusement, or my own,

when the young reptiles readily crawled out of their envelope, and roved about very prettily when placed on the carpet or an unpolished table-cover. Although they were probably rather prematurely liberated, their colours and markings were nearly perfect, being only a little paler than maturer specimens. The snake is easily tamed, and brought to come daily for its food, and to notice those who are attentive to it, but will shun strangers.

OPHIDIA. VIPERADAE.

VIPER or ADDER—*Pelias Berus*, *Coluber Berus*.—Linn.

This is the only poisonous British reptile. It is common throughout our county, but not so numerous as the ringed snake. The form of the viper is not so elegantly tapered, nor are the colours so bright and lively as those of the snake. The Red Viper and the Black Viper are now considered as varieties only of the common species.

The AMPHIBIA, like the true *reptilia*, constitute a small group, which has been considered by authors a class of the order reptilia; but Professor Bell makes it a distinct class.

ANOURA. RANADAE.

COMMON FROG—*Rana temporaria.*

This is a prettily coloured and active creature, therefore less repulsive than its congeners. It abounds in early spring, the season of depositing its ova, in slowly running ditches and stagnant ponds; and in summer in moist and marshy meadows. Sometimes in early autumn, multitudes of young frogs and toads are seen migrating from the borders of their native ponds to more convenient habitations.

It has been believed that the young of the amphibia could not be developed to the perfect form in darkness; but it is has been lately proved by Higginbottom, "that absence of light has no influence in retarding their development."

ANOURA. BUFONIDAE.

The TOAD—*Rana Bufo.*—Linn. *Bufo vulgaris.*—Laurent.

This is also very common. In general opinion the Toad bears the same relation to the Frog, as the Viper does to the Snake. Its form is clumsy, its colours dull, and its movements slow; and to most persons it is disagreeable or loathsome; others who are accustomed to study these creatures, look on them not only without disgust, but with much agreeable interest.

URODELA. SALAMANDRADAE.

The WARTY NEWT or WATER EFT—*Triton cristatus.*

EVET, of Somersetshire.

This is the largest of the British Newts. It is common in ponds and ditches, from early spring to the end of summer; and in old shrubby banks, hollow trees, and rubbish, all the winter.

SMOOTH NEWT, EFT, or EVET—*Lissotriton; Lacerta aquatica.*—Linn.

This also is very common in still water in summer, and in grass banks, &c. in autumn and winter.

FRINGE-FOOTED SMOOTH NEWT.

This is also common, with habits like those of the last mentioned, and perhaps is only a more perfectly developed form of the same.

WEBB-FOOTED SMOOTH NEWT.—*Lissotriton Palmipes.*

This, the prettiest of the Newts, was first found, as British, on Clay Hill Farm, at Cannington, in our county. It has been since found near Edinburgh, and both occurrences are published in the "Zoologist," and in the second edition of Bell's "British Reptiles." I had long possessed specimens of the new British Newt, when in April, 1843, I received a note from the Dean of Westminster, who was then giving lectures on reptiles to the Ashmolean Society.

I extract the following from Dr. Buckland's characteristic note :—

"Have you ever noticed how many species of Water Newts live in your stagnant ponds? We have three near Oxford, as plentiful in ponds remote from ducks, as once the Saurians were in the mud of the nascent lias."

In reply, I informed the Dean that I had paid a good deal of attention to these creatures, and that I had a new species, which I described to him. My note was handed over to Professor Bell, and it produced an immediate communication from that gentleman, of which the following is an extract :—

"I shall be particularly glad to have some of the little Newts, as I think it exceedingly probable that it may prove to be a new species."

Without delay I sent four specimens in a letter. What a privilege to be able to send to a friend four living four-footed beasts in a post letter! These soon caused the following acknowledgment, written at Selborne, and I believe in the very house in which the universally admired "History of Selborne, by Gilbert White," was written :

"I thank you very sincerely for sending the Newts, three of which are living and in good health, in a glass globe. The species is undoubtedly distinct, and I believe undoubtedly new, not only to this country, but to science. I shall have an opportunity of figuring them before long in my second edition of the 'Reptiles.'"

"Thomas Bell."

Soon after I received the above, I had another highly characteristic note on the subject from Dr. Buckland, from which I copy the following :—

"I am glad to find your Salamanders are new species, and that you are in communication with Mr. Bell. Your

neighbourhood, before the days of drainage, must have been a perfect paradise for such creatures, and some rare species may still survive."

"W. BUCKLAND."

In 1848, Mr. Wolley discovered this Newt near Edinburgh, and published an account of it in the "Zoologist" for July of the same year; ultimately it proved to be known on the Continent, although quite new to Britain. The second edition of the "British Reptiles" contains many particulars relating to this species, and to its capture in Somersetshire.

Appendix to Paper on Holwell Cavern.

PAGE 14.

Being desirous to try how far the transfer of carbonate of lime, from a piece of *limestone* upon a piece of *clay-slate*, under electric action, would succeed,—that is, whether the carbonate of lime so transferred, would appear in the form of *common* carbonate of lime upon the clay-slate, or of *arragonite*,—I made the following experiment. I placed a large glass funnel vertically in a wooden stand, filling it about one-fourth with a mixture of limestone and clay-slate coarsely powdered, and then pouring in water up to the brim. Underneath this I suspended a piece of clay-slate, some inches in length, on the middle of which the water from the funnel above was constantly dropping, keeping the greater portion of the suspended clay-slate continually wet. On one end of this wet slate I caused a piece of *limestone* to rest, connecting it by a platinum wire with the *positive* pole of a small and weak, but constant, voltaic battery. On the opposite end of the wet clay-slate, I caused another, but smaller piece of *clay-slate* to rest, connected by a platinum wire with the *negative* pole of the same battery. The electric action gradually drawing to the positive limestone a portion of the very minute quantity of mineral acid common to almost all waters not distilled, extracted slowly a part of the lime, which on well known principles was carried to the negative clay-slate, and is now depositing itself in the form of, *not*

common carbonate of lime, but of *groups of crystallized arragonite*, in starry concretions of prismatic needles, issuing from their respective centres. These crystals are formed upon the upper piece of negative slate in the greatest perfection, and are beginning to be formed upon the whole of the large piece of clay-slate which supports the limestone and slate that rest upon it ; and in the course of time, if the experiment be continued sufficiently long, will entirely cover it. This experiment was set in action August 14th, 1851, so that at present it has only continued for seven months and a half. I cannot explain *why arragonite* should make its appearance instead of some one of the numerous formations of common carbonate of lime ; but such is the fact, and it is perfectly explanatory of the growth of arragonite upon the clay-slate of Holwell Cavern. I should add that the droppings of the water from the funnel are caught by a pitcher standing underneath the suspended clay-slate, and daily returned into the funnel above.

ANDREW CROSSE.

Broomfield, March, 1852.

Appendix to Paper on Worle Camp.

Kingston Lisle, Wantage,

April 14th, 1852.

My dear Sir,

I at length, somewhat tardily I fear you will think, fulfil my promise of sending you the map* of the old encampment on Worle Hill, and I shall be only happy if it is of the slightest use to you, in helping to illustrate the description you are about to give of that interesting spot, in your Somersetshire Archæological Journal.

I have coloured the map, thinking to make it more intelligible to you than it would be if the details had been simply etched with the pen, and particularly so, as I happen to have worked it on so small a scale.

I hope, however, on a little patient examination, it will be intelligible to those who have visited the spot, although I feel satisfied that the extensive nature of the outworks on the sides of the hill, has escaped the notice of the generality of visitors. I shall be very glad if what I have attempted to describe, in reference to this interesting portion of these old defensive works, will only call the attention of the learned in such matters to this part of the subject, before the ruthless march of improvement destroys utterly every vestige of what I think can now be satisfactorily traced, to have been a systematic, though, to modern ideas, rude mode of defence, adopted in olden times on this spot.

I imagine the remains of the clusters of detached tri-

* This illustration is given at page 64.

angular platforms, and particularly those flanking the hollows in the sides of the hill, to have been placed so that, on a sudden emergency, the slingers could hastily arrange themselves in the best position, so as to cover the retreat of their friends, and meet an advancing foe.

I have been led to the belief that these clusters of platforms were arranged principally for the use of the sling, in consequence of their being detached from each other, the slinger requiring *elbow room.*

The large cluster between the two roads to the north of the encampment, I only discovered just before I was leaving the place the other day. You will observe that they are placed almost at the head of a hollow in the side of the hill, extending from the sea cliff, which is much indented at that spot, and might have afforded a landing for boats. You will see also, on looking more eastward, another cluster, apparently placed for guarding a passage for cattle over the inner ditch of the probable cattle enclosure.

The serrated *upper* edge of the rampart, detached from the main rampart on the south of the camp, which you will observe I have made continuous, can be easily traced in many parts; while the scolloped line with which I have fringed the *under* side of the main south rampart, is meant to represent what I think can be traced perceptibly, of the remains of places of shelter for the sentries, formed in the facing of the wall; and the same appears to have existed in many parts *within* the camp on the south side, but my plan is on too small a scale to mark them distinctly, as I thought it was also so in the case of the mysterious small circular sinkings on the main walls. On second thoughts, however, many of the latter might be marked on the plan if it were wished, but I had not time to attempt to do so accurately when on the spot the other day.

Except on the subject of the narrow winding path traced from the limekiln to just within the old cattle enclosure, I don't know that I can say more to you now,—the path, from the direction it takes, and from its being flanked by, and intersecting in a marked manner, many of the outworks, I imagine to be coeval with the encampment.

I only regret that I did not have you with me to go over the whole ground, and attempt to explain on the spot what may, without a careful survey, be looked upon as a *wild theory*—but Archæologists *must expect to afford a little to laugh at now and then.*

Yours very truly,

E. MARTIN ATKINS.

Rev. F. Warre.

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RULES.

THIS Society shall be denominated "THE SOMERSETSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY;" and its objects shall be, the cultivation of, and collecting information on, Archæology and Natural History, in their various branches, but more particularly in connection with the County of Somerset.

II. The Society shall consist of a Patron, elected for life; a President, elected for three years; Vice Presidents; General, and District or Local Secretaries; and a Treasurer; elected at each Anniversary Meeting; with a Committee of twelve, six of whom shall go out annually by rotation, but may be re-elected.—No person shall be elected on the Committee until he shall have been six months a Member of the Society.

III. Anniversary General Meetings shall be held for the purpose of electing the Officers, of receiving the Report of the Committee for the past year, and of transacting all other necessary business, at such time and place as the Committee shall appoint; of which Meetings three weeks notice shall be given to the Members.

IV. There shall also be a General Meeting, fixed by the Committee, for the purpose of receiving Reports, reading Papers, and transacting business.—All Members shall have the privilege of introducing one friend to the Anniversary and General Meetings.

V. The Committee is empowered to call special Meetings of the Society, upon receiving a requisition signed by ten Members.—Three weeks notice of such Special Meeting and its object, shall be given to each Member.

VI. The affairs of the Society shall be directed by the Committee, (of which the officers of the Society shall be EX-OFFICIO Members) which shall hold Monthly Meetings for receiving Reports from the Secretaries and Sub-committees, and for transacting other necessary business; five of the Committee shall be a quorum.—Members may attend the Monthly Committee Meetings, after the official business has been transacted.

VII. The Chairman at Meetings of the Society, shall have a casting vote in addition to his vote as a Member.

VIII. One (at least) of the Secretaries shall attend each

Meeting, and shall keep a record of its proceedings.—All Manuscripts and Communications, and the other property of the Society shall be under the charge of the Secretaries.

IX. Candidates for admission as Members shall be proposed by two Members at any of the General or Committee Meetings, and the election shall be determined by ballot at the next Committee or General Meeting; three-fourths of the Members present ballotting, shall elect. The rules of the Society shall be subscribed by every person becoming a Member.

X. Ladies shall be eligible as Members of the Society without ballot, being proposed by two Members, and approved by the majority of the Meeting.

XI. Each Member shall pay ten shillings on admission to the Society, and ten shillings as an Annual Subscription which shall become due on the first of January in each year; and shall be paid in advance.

XII. Donors of Ten Guineas or upwards shall be Members for life.

XIII. At General Meetings of the Society the Committee may recommend persons to be ballotted for as Honorary or Corresponding Members.

XIV. When any office shall become vacant, or any new appointment shall be requisite, the Committee shall have power to fill up the same; such appointments shall remain in force only till the next General Meeting, when they shall be either confirmed or annulled.

XV. The Treasurer shall receive all Subscriptions and Donations made to the Society, and shall pay all accounts passed by the Committee; he shall keep a book of receipts and payments, which he shall produce whenever the Committee shall require it; the Accounts shall be audited previously to the Anniversary Meeting, by two Members of the Committee chosen for that purpose, and an abstract of them shall be read at the Meeting.

XVI. No change shall be made in the Laws of the Society except at a General or Special Meeting, at which twelve Members at least shall be present.—Of the proposed change a month's notice shall be given to the Secretaries, who shall communicate the same to each Member three weeks before the Meeting.

XVII. Papers read at Meetings of the Society, and considered by the Committee of sufficient interest for publication, shall be forwarded (with the Author's consent) to such Periodical as shall be determined by the Committee to be the best for the purpose, with a request that a number of such papers may be printed separately, for distribution to the Members of the Society, either gratuitously or for such payment as may be agreed on.

XVIII. No Religious or Political Discussions shall be permitted at Meetings of the Society.

XIX. That any person contributing Books or Specimens to the Museum shall be at liberty to resume possession of them in the event of the property of the Society ever being sold or transferred to any other county. Also persons shall have liberty to deposit Books or Specimens for a specific time only.

N.B. One of the objects of the Society shall be to collect by donation or purchase, a Library and Museum, more particularly illustrating the History, Natural, Civil, and Ecclesiastical, of the County of Somerset.

*** *It is requested that Contributions to the Museum or Library, be sent to the Curator, at the Society's rooms, Taunton.*

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Metford, W. M.D. *Flook House, Taunton*
Michell, Rev. R. B.D. *Magdalen Hall, Oxford*
Miles, W. M.P. *Leigh Court*
Mogg, J. R. *Bath*
Mogg, J. F. Y. *Midsomer Norton*
Montgomery, Rev. R. M. *Taunton*
Moody, C. A. M.P. *Kingsdon*
Moor, Rev. R. W. *Stoke St. Gregory*
Moore, C. *Ilminster*
Morle, Thomas, *Cannington Park*
Morgan, W. *Claremont, Weston-super-Mare*
Moysey, H. G. *Bathealton Court*
Munkton, W. W. *Curry Rivel*
Murch, E. *Bridgwater*
Murch, Rev. Jerom, *Bath*

Naish, B. *Stone Easton*
Neville, Ralph, *Butleigh, Glastonbury*
Newton, F. W. *Barton Grange*
Nicholetts, J. *South Petherton*
Nicholls, J. *Wells*
Norman, W. *Ashfield, Taunton*
Norman, G. L. *Eglesfield, Yatton*
Norman, A. M. *Christ Church, Oxford*
Norman, J. *Taunton*
Norman, J. *Claverham*
Norris, J. *Thorncombe*
Norris, Hugh, *South Petherton*
Nutting, Rev. H. *Chedzoy*

Paget, J. M. *Cranmore Hall, Shepton Mallet*
Paget, Mrs. „ „ „ „
Palairet, Rev. R. *Norton St. Philip*
Parish, Rev. C. P. *Staple Fitzpaine*
Parr, Rev. H. *Taunton*
Patton, T. *Bishops Hull*

Paul, Theodore, *Taunton*
Paul, Rev. C. S. *Wellow, Bath*
Payne, J. H. *Taunton*
Pearson, T. *Exeter*
Penny, Rev. C. D.D. *Crewkerne*
Perceval, Capt. *Chapel Cleeve*
Perry, Rev. G. G. *Lincoln College, Oxford*
Petherham, J. *High Holborn, London*
Phelps, Rev. W. *Meare*
Philipps, Dan, *Bridgwater*
Pigott, J. H. Smyth, *Weston-super-Mare*
Pigott, G. O. S. „ „ „
Pigott, A. S. „ „ „
Pigott, H. T. C. S. *Brockley Court*
Pigott, E. F. S. *Lincolns Inn*
Pike, J. *Paddington*
Pinchard, W. P. *Taunton*
Pinder, Rev. Professor, *Wells*
Pinney, W. M.P. *Somerton Erly*
Pinney, Miss, „ „
Plowman, T. *North Curry*
Pollard, G. *Taunton*
Poole, G. S. *Bridgwater*
Poole, Rev. J. *Enmore*
Popham, F. *Bagborough*
Porch, T. P. *Edgarley*
*Portman, Lord, *Bryanston House, Dorset*
Portman, Rev. F. B. *Staple Fitzpaine*
Powell, H. *Wells*
Prance, V. *Nether Stowey*
Pring, J. D. *Taunton*
Pring, J. H. M.D. *Weston-super-Mare*
Pulman, Rev. W. W. *Wellington*
Pulteney, Rev. R. T. *Netherbury, Dorset*
Pyne, Rev. W. *Taunton*

Quekett, E. *Langport*

Raban, R. B. *Hatch Beauchamp*
Raban, Major, „ „
Reeves, F. *Taunton*
Redfern, Rev. W. T. *Taunton*
Richards, Rev. T. *Alcombe*
Richards, W. *Alcombe*

Robbins, G. *Bath*
Rodbard, John, *Aldwick Court, Wrington*
Roblyn, T. M.D. *Weston-super-Mare*
305 Rogers, T. „ „
Rooke, Mrs. S. „ „
Routledge, Rev. W. *Bishops Hull*
Rowcliffe, Charles, *Stogumber*
Rowley, Rev. W. W. *Weston-super-Mare*
310 Rundell, E. W. *West Monkton*
Russell, Rev. A. *Emsworth, Hampshire*

Sanford, E. A. *Nynehead Court*
Sanford, W. A. „ „
Scarth, Rev. H. M. *Bathwick*
315 Schuldam, Mrs. E. *Norton Fitzwarren*
Scott, Rev. J. P. *Staplegrove*
Sealy, John, *Bridgwater*
Sealy, J. L. „
Serel, T. *Wells*
320 *Seymour, H.D. M.P. *Knoyle, Wilts*
Shaw, Rev. W. H. E. D. *Pilney*
Sheppard, A.B. 16, *Lincolns-Inn-fields, London*
Sheppard, J. *Frome*
Sheppard, W. H. *Keyford House, Frome*
325 Sheppard, F. J. *Wells*
Shipton, Rev. J. N. D.D. *Othery*
Shore, J. *Whatley, near Frome*
Slade, Wyndham, *Munty's Court*
Smith, N. *Clifton*
330 Smith, Major, T. *Weston-super-Mare*
Smith, Rev. C. *Bishops Lydeard*
Sotheby, Rev. T. H. *Milverton*
Sparks, W. *Crewkerne*
Speke, Mrs. *Roeford Lodge*
335 Spencer, Rev. J. W. *Wilton*
Sperrin, J. *Weston-super-Mare*
Spicer, N. W. *Chard*
Spry, J. H. M.D. *Bath*
Squire, F. *Pall Mall, London*
340 Stewart, Rev. T. B. *Wookey*
Stone, W. H. *Taunton*
Stone, Rev. W. *Taunton*
Stradling, W. *Chilton-super-Polden*

Sutton, H. *Taunton*
Sully, T. *Bridgwater*
Sweet, Rev. C. *Broadleigh, near Wellington*
Sweet, H. *Taunton*
Symes, Rev. R. *Yatton*
Synge, F. H. *Weston-super-Mare*

Talbot de Malahide, the Lord, *Evercreech*
Thompson, Charles, *Bridgwater*
Thring, H. *Alford, Castle Cary*
Todd, Major, *Taunton*
Tomkins, C. M.D. *Weston-super-Mare*
Toogood, Rev. J. J. *St. Andrews, Holborn, London*
Trenchard, H. C. *Taunton*
Trevelyan, Sir W. C. Bart. *Nettlecombe Court, and Wallington, Northumberland*
Trevelyan, Lady " " " "
Trevelyan, Sir C. E. *Treasury, London*
Trevelyan, Rev. E. O. *Stogumber*
Trudell, James, *Taunton*
Tucker, Rev. H. T. *Leigh Court*
Tucker, W. *Coryton Park, Devon*
Turner, Rev. W. H. *Trent*
Turner, A. Jun. *Staplegrove*
Turner, C. J. *Staplegrove*
Turner, Rev. W. H. *Banwell*
*Tynte, Col. C. K. K. *Halswell House*
Tynte, Lieut.-Col. M.P. *Cefn Mabley, Glamorganshire*
Tynte, Capt. K. 78, *Chester Square, London*

Uttermare, T. B. *Langport*

Vane, Rev. J. *Burrington, Wrington*
Vibart, James, *Chilliswood*
Voules, Rev. T. A. *Beer Crocombe*

Wainwright, C. *Shepton Mallet*
Walker, L. *King's Road, Gray's Inn, London*
Wall, J. C. *Bristol*
Walter, W. *Oldbury Lodge*
Walter, R. *Stoke-sub-Hamdon*
Walters, G. *Frome*
Warre, Rev. F. *Bishops Lydeard*
Warre, Miss, *Cheddon Fitzpaine*
Warren, J. F. H. *Langport*
Warren, Rev. J. *Bawdrip*

385 Webber, Rev. E. *Runnington*
Welman. C. N. *Norton Manor*
Welsh, W. I. *Wells*
Wells, E. N. „
West, Rev. G. H. *Corfe*
390 West, G. *Corfe*
West, Samuel, *Bridgwater*
Weston, Plowden C. J. *South Carolina, United States*
White, Eales, *Taunton*
White F. *Wellington*
395 White, F. G. *Taunton*
Whitehead, Rev. E. *Saltford, Bath*
Whitehead, Rev. W. B. *Chard*
Whiting, Rev. H. B. *Writhlington, Bath*
Whitmash, E. *Taunton*
400 Wickham, Rev. H. D. *Frome*
Wickham, Whalley, *Frome*
Wills, Rev. T. A. *West Buckland*
Williams, Rev. T. *Burnham*
Wilmott, W. R. *Weston-super-Mare*
405 Winter, Mrs. *Watts House*
Wolff, D. *Foreign Office, London*
Wodehouse, Rev. N. *Worle*
Woodforde, F. H. M.D. *Taunton*
Woodland, J. *Taunton*
410 Woodley, W. A. *Taunton*

Yatman, Rev. J. A. *Winscombe, Sidcot*
Young J. *Elm Cottage, Taunton*

The following have been elected since 1851.

Adair, W. *Heatherton Park*
Anstice, Mrs. J. *Cannington*
415 Bluett, C. *Taunton*
Chamberlain, G. *Castle Cary*
Easton, R. *Taunton*
Hall, Rev. C. R. *Pitminster*
Hood, Sir A. A. Bart. *St Audries*
420 Lambert, W. C. *Knoyle*

Members are requested to inform either of the Secretaries of any errors or omissions in the above List; they are also requested to authorize their Bankers to pay their subscription, annually, to Messrs. Badcock, or Messrs. Stuckey, Taunton; or to either of their branches; or their respective London Agents; on account of the Treasurer.

Taunton: Frederick May, Printer, High Street.

Restoration of the Tower of Taunton Saint Mary Magdalene.

At a Meeting held at the Market House, Taunton, May 14, 1852, *to consider the state of the Tower of the Church of Taunton St. Mary Magdalene.*

REV. H. PARR, the Vicar, in the Chair.

Present—Messrs.

Steevens, Porter, Edwards, (Churchwardens.)	Giles, W.	Sutton, C.
	Hayman,	Sweet,
	Hucklebridge,	Todd, Major
Badcock, H.	Jeboult,	Trenchard, F. A.
Badcock, R.	May,	Trood, H.
Baker,	Pinchard,	Turle,
Beadon, E.	Pring,	Welch,
Chard,	Rawlinson,	Woodland, W.
Coker, W.	Rendell,	Woodford, W.
Cox, A. C.	Small,	Wright,
Fisher, T.	Smith, Rev. F. J.	

A Report of the state of the Tower, with plans, from Messrs. Carver and Giles, was laid before the Meeting. *A Summary of the Report with an Estimate having been read*, it was moved by Mr. R. BADCOCK, seconded by Mr. F. A. TRENCHARD, and *resolved unanimously*,—

That this meeting receives the Report obtained by the late and present Churchwardens, as to the state of the Tower, and offers its best thanks to those gentlemen for the course they have taken.

That the Report fully satisfies this meeting, that immediate proceedings are necessary for the repair and restoration of the Tower: with reference not only to its ornamental character, but to the security of the fabric of the Church.

It was moved by Mr. H. BADCOCK, seconded by Mr. JEBOULT, and *resolved unanimously*,—

That it is the opinion of this Meeting, that the necessary sources for proceeding with such repair and restoration, should be raised by parochial rate, and subscriptions in aid thereof, and that the Churchwardens be requested to convene a Vestry Meeting, in order to consider the said report, and the propriety of making a rate for the purpose of raising such sum, or to take such other steps as may at such Vestry Meeting be agreed on.

It was moved by Mr. E. BEADON, seconded by Mr. PINCHARD, and *resolved unanimously*,—

That previously to the convening of such Vestry, the proceedings at this Meeting, and a summary of Messrs. Carver and Giles's Report be printed and circulated for the information of the Parishioners and the Public, under the direction of the Vicar and Churchwardens.

The Churchwardens announced their intention to convene such Vestry Meeting.

HENRY PARR,

Chairman.

Subscriptions in aid of a proposed rate have been promised by the Right Hon. Lord Portman, Lord Lieutenant; the Right Hon. Lord Ashburton, Impropriator; the Ven. the Archdeacons of Taunton and Bath; F. H. Dickenson, Esq.; and other influential gentlemen in the county. Further subscriptions are requested, which will be received by the Vicar, by either of the Churchwardens, and at the different Banks in Taunton.

SUMMARY OF THE REPORT.

IN brief my report is, that the Tower is in a very bad state. That the evils affecting it have not been produced by one great radical defect, but rather by a number of causes operating in various ways.

The Foundations appear to be solid and secure, and the walls, (though not so massive as in some other instances,) are of considerable thickness. And yet many of the present evils must have manifested themselves shortly after the completion of the building.

The chief of them is the want of sufficient strength in the great arches supporting the Eastern and Western walls, from the absence of proper relieving arches over them. This deficiency has at an early period produced vertical fractures in the superimposed walls, extending to nearly half their height, and in spite of all the remedies yet applied (in the shape of iron tie bars and cramps,) these settlements have extended, until large portions of the walls are almost ruinous.

The mode by which I propose to remedy this evil, is by inserting even now, proper relieving arches, and then restoring the walls above to a sound condition.

The second great cause of mischief seems to be, the defective construction of the masonry of the walls behind the ashlared fronts. Almost every where, large flints and stones are built in without regard to their position, and without any secure bond; hence vertical joints are seen with scarcely a break, often six or seven feet in height, the result has been, that every tendency to settlements, or unequal pressure, has shewn itself by long vertical fissures opening. Fortunately the excellency of the mortar, has served to retard their extension.

The whole Tower is faced on its exterior with dressed stones laid in courses; hence the fractures seen on the interior surfaces do not correspond with similar ones on the outside; in each case they generally follow the joints of the

masonry, which is (as I have said) different in kind ; nearly all the larger cracks do however extend quite through the walls, producing loose work inside, and bursting out the surfaces of dressed stone on the exterior.

By inserting long bond stones across these fractures, as high up as they can be traced; by bonding the walls to each other at all the interior angles ; and by the iron plates proposed to be used as bonds, the walls will I believe be far better calculated to resist pressure than when they were erected.

A third great cause of evil, has been the decay of the sand stone, with which the plain faces of the exterior of the Tower were built. This stone is evidently quarried not far from the town, probably at Norton or Bradford, and forms one variety of the "new red sand stone group." It seems generally to have been well selected, and is very hard and compact where not decayed. It is at the angles and buttresses, that the decomposition has become so serious, and wherever the stone has been exposed on more than one side to the action of the weather. All these exposed parts must be re-built with the more durable stone from the Hamden Hill quarries. This latter material is that with which all the ornamental features of the Tower are constructed, including the parapet and pinnacles, the windows, string courses, arches, &c. It belongs to the class of "inferior oolites," and ranks high as material for building. The quarries were worked by the Romans, at a very early period. There is a great difference in the quality of the beds. The best stone being whiter and more expensive to work from its hardness and closer texture. This has led to the use of the inferior stone in great quantity, until an opinion has prevailed that the better beds were exhausted. It is certain however, that excellent stone can yet be obtained by paying a rather higher price for it. In St. Mary's Tower, there is a large amount of good stone little injured by the wear of 350 years. Unless laid in its bed, that is, with the grain or strata of the stone horizontally as dug from the quarry, it however will not endure either weather or vertical pressure long, and the decay of the Ham Hill stone work throughout the Tower, is limited by the extent to which it has been used with a vertical bed. Unfortunately nearly all the prominent features have suffered from this cause. The jambs of the windows are generally

sound, while the parapet though renewed in portions at least more than once, is now again ruinous. In the restoration of these parts wherever practicable, the stone must be used in its bed, or decay will again speedily commence. These are the principal causes which have reduced this magnificent building to so lamentable a condition. And when we consider that it contains 8 bells suspended at a height of 90 feetfrom the ground, which with their framing, altogether are nearly equivalent to a weight of 15 tons,* and that this ponderous mass is so often set in violent motion, we shall be only surprised that greater evils have not ensued. The bell ringing has no doubt increased the defects alluded to. I am inclined to believe that the Tower will be quite qualified to resist this strain when strengthened by the modes proposed.

Another source of mischief has been the fall of water from the roof to the ground, on the north side ; much of the decay on this side of the building, is to be attributed to this cause, and when any restoration takes place, the water must be conveyed down by a proper pipe fixed within the Tower.

Having thus laid before you the result of the investigation undertaken at your request, I have little further to add. We have undertaken the, in some respects not pleasant duty, of making the public fully acquainted with the decay of a very noble edifice. It does not perhaps form a part of our commission to dwell on its great merits. Well known throughout England as the Tower of St. Mary Magdalene in Taunton, is, any eulogies would be superfluous.

The duty of those to whom the task of reparation shall be confided, must be limited to one object. The restoration of every feature and moulding to as good a condition as that in which its original builder left it. Old stones should not be re-cut to make them look like new. Lichens and moss are more picturesque than new ashlar. Where necessary the old work must be cut out, and new inserted, and if for a time the Tower wears rather a party coloured aspect, it will be preferable to that of one uniform smartness, and will soon tone down to an agreeable hue again.

On the succeeding sheet will be found a list of the por-

*I cannot answer for the strict accuracy of this weight, the bells not being all marked.

tions of the building already lost, or in danger at present of falling; and also an estimate of the cost of the entire restoration. It should be added that the work may be undertaken in two portions and may be spread over a few years. If the sum of £1800 can be raised during a term of a year and a half, the work can be commenced, and many of the more serious evils arrested, and by the expiration of this term a further sum would perhaps be found. I believe that the upper stages can be restored by a scaffolding built out from the windows, and this will prevent the serious inconvenience which a permanent frame work raised from the ground would cause.

Interruption would of course ensue to the bell ringing, but not to the church services.

I am, Gentlemen,

Yours very faithfully,

CHARLES EDMUND GILES,

(for Carver and Giles.)

To the Vicar and
Churchwardens of the
Parish of St. Mary Magdalene, Taunton.

Portions of the Tower which have either fallen, or have been removed for safety at different times.

Three of the large pinnacles in the middle of the parapets on either side. Portions of the third are lost, and when the whole has fallen, all authority for the restoration of this feature will have perished.

Two of the small overhanging pinnacles at the angles of the parapet have been more than half removed, and the two remaining are on the eve of falling.

All the gurgoyles which were excellently carved, are almost obliterated, fragments only remaining.

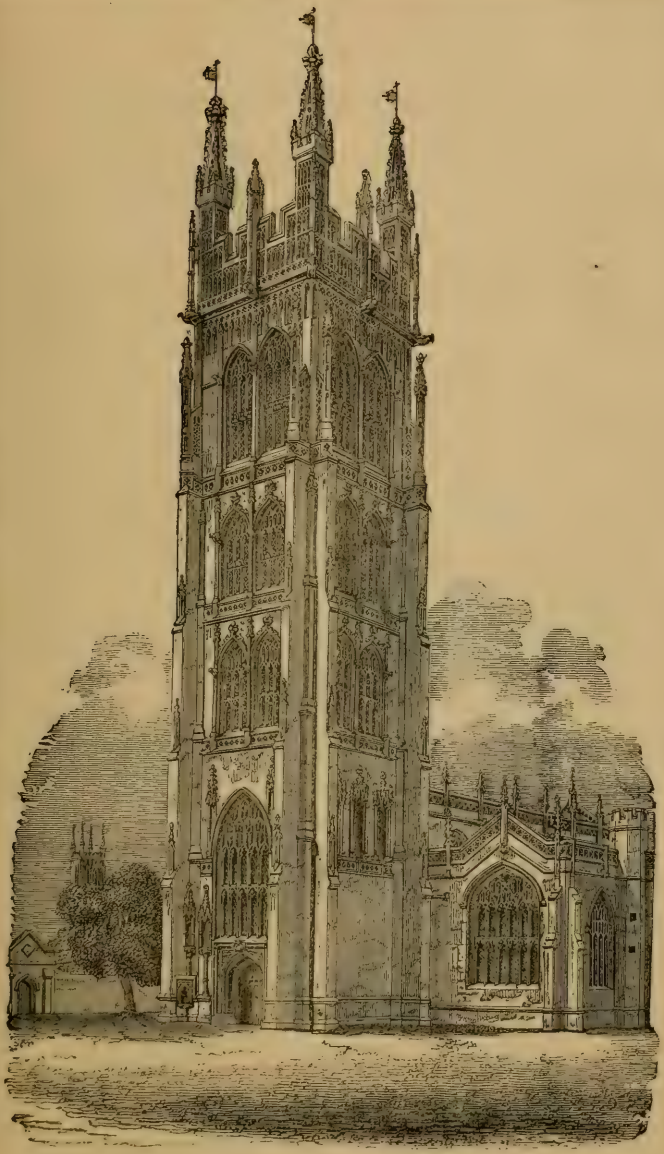
Many portions of the large pinnacles and of the parapet are lost.

The whole of the battlements and pinnacles of the stair turret have fallen, and only a few fragments remain on the roof inside, or at the edge overhanging.

Nearly all the small pinnacles on the faces of the buttresses have perished.

The richly carved niches are so much decayed, that in a short time their restoration will be only conjectural.

All the carved angels and heads amounting to more than a hundred, will soon retain no traces of their original design.



TOWER OF ST. MARY MAGDALENE'S CHURCH
TAUNTON.

NATURAL HISTORY

Portions of the Tower which are at the present time in danger of falling.

Portions of the battlements of the stair turret, weighing more than 2 cwt. are in imminent danger, being quite detached and overhanging the wall.

At the north eastern angle of the parapet, the small pinnacle projecting from the larger one, and overhanging the north aisle, rests entirely on a very decayed and dangerous gurgoyle. This pinnacle weighs probably nearly 10 cwt. and is disjointed, crooked, and at its centre shattered so much, as to render it extremely dangerous.

The great pinnacle at the north eastern angle of the parapet is falling apart. The finial is splitting asunder, and many fragments are likely soon to be precipitated on the roof of the church.

At the south eastern angle of the parapet, the small pinnacle is in a dangerous state, and portions of the great pinnacle are quite loose.

At the south western angle of the parapet, the small pinnacle is quite unsafe, and several cwt. of stone may fall at any time. A stone weighing about eight or nine pounds has fallen, and has been caught by the projecting neck of the decayed gurgoyle, where it is just balanced, and overhangs the corner at which the school children play between school hours.

The great pinnacle at this corner has also many very dangerous portions.

The great pinnacle and the small overhanging one at the north western corner, are in a similar condition with the preceding.

The pinnacle in the centre of the parapet on the north side has portions quite loose which would fall at a touch, the small shaft in connection with it, depends for support on the legs of the gurgoyle, which are worn away and reduced to the diameter of an inch.

All the great pinnacles surmounting the buttress are dangerous. Four of them are in a frightful state and will fall before long, they weigh more than 10 cwt. and two would fall on the church.

The buttresses on the north side of the west front is undermined and separating from the wall. A great portion now rests on about eight inches of masonry much decayed. Above two tons of masonry will probably slip at once when this stone gives way.

There are many hundreds of smaller features and fragments of stone, scattered over the entire surface of the Tower in a falling condition, and on the west front are several iron cramps and ties, weighing about 15 lbs. each, which must fall soon, one is particularly threatening, and one has lately fallen weighing 9 or 10 lbs.

An Abstract Estimate of the cost of a complete Restoration of the Tower of the Church of St. Mary Magdalene, Taunton.

	£	s.	d.
Restoring all the Windows, Panels, String courses, carved features of every description, rebuilding the entire Parapet and Pinnacles, rebuilding the Buttresses and Angles of the Tower, with the best Ham Hill stone, in a thoroughly good and substantial manner - - - - - - -	2648	16	3
Restoring the exterior faces of the Tower wherever requisite with sand stone, and including pointing, and all masonry of every description necessary for the works proposed to be executed in the accompanying Report, as "restoration of fractures and settlements," and for "strengthening and binding the interior angles," &c.	372	3	4
All Iron work of every description necessary for bond plate or for stays, &c. - -	71	13	2
Relaying the Lead work on the roof with the gutters, &c. - - - - - - -	42	10	0
Woodwork to Roof and the several floors -	60	0	0
A Scaffold to reach to one half the height of the Tower, and adjusted to fix as a cradle scaffold from the several floors, allowing for the value of the materials - -	400	0	0
	£3595	2	9

May 3rd, 1852.

The Report of Messrs. Carver and Giles in full, with the Drawings and Plans, may be seen at Mr. Porter's, North-street.

Vol 5 - XXVIII
Duncan H.
31.12.83.

THE PATENT GUTTA PERCHA TUBING,

THICK AND THIN SHEET, MILL BANDS,

Water Jugs and Basins, Splints, Stethoscopes,

CARBOYS, SYPHONS, FLASKS, STOPCOCKS,

LINING FOR CISTERNS, BUCKETS,

WINDOW BLIND CORD, PICTURE FRAMES,

INKSTANDS,

And every other article of the Patent Gutta Percha Company's Manufacture, supplied at the same prices as at the Manufactory, by F. MAY, High Street, the Company's Agent for Taunton.

Amongst the peculiar properties possessed by this Tubing which render it an article of great value, not only to manufactures, but to the public generally, are the following :—

Lightness, combined with remarkable strength (a three-quarter inch tube having resisted a pressure of 337 lbs. on the square inch.)

Non-affection by the carbonic, acetic, hydrofluoric, or muriatic acids, or by the most caustic alkalies. This remarkable property renders Gutta Percha so valuable for the conveyance of water, lining of cisterns, &c. being free from the deleterious effects to Health resulting from the use of lead for those purposes.

Peculiar power of resisting Frost.

Readiness with which it can be connected (by means of the Gutta Percha union-joints) with the water tap, or pump, and used for watering gardens, washing windows, carriages, &c.

Great lengths in which it can be made (50 to 500 feet) without a joint.

Ease with which the requisite joints can be made.

Facility with which it can be cut open, and again repaired, in case of stoppage.

Extraordinary power of conducting sound.

APPLICATION OF GUTTA PERCHA TUBING.

The conveyance of Water, Oil, Acids, Gas, & other Chemicals, Liquid Manures, &c.
Drain and Soil Pipes.
Suction Pipes for Fire Engines.
Pump Barrels for Feeding Pipes
Syphons.
For watering Gardens, Streets, washing Windows, &c.
Ventilation of Mines, &c.
Ship Pumps, &c.
Ear and Mouth Tubes.
Speaking Trumpets, in lieu of Bells, &c. &c.